

Racial Reclassification and Political Identity Formation*

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Abstract

This article leverages a phenomenon of racial reclassification in Brazil to shed new light on processes of identity politicization. Conventional wisdom tells us the history of race mixture, fluid racial boundaries, and stigmatized blackness lead Brazilians to change their racial identifications—to reclassify—toward whiteness. But in recent years Brazilians have demonstrated a newfound tendency to reclassify toward *blackness*. I argue this sudden reversal is the unintended consequences of state-led educational expansion for the lower classes. Educational expansion has increased newly mobile citizens' exposure to information, social networks, and the labor market, leading many to develop racialized political identities and choose blackness. I develop this argument by drawing on in-depth interview data, systematically test it with longitudinal analysis of microlevel census data, and test alternative explanations with original survey experiments. This article contributes a novel account of identity politicization and emphasizes the interaction between social structures and citizenship institutions.

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“That’s when I was like ‘I’m black,’ you know?” These are the words of Jorge, a university student living in Recife, a coastal city in northeastern Brazil. Like many other Brazilians I met, Jorge tells me that on his birth certificate he is classified as white, but that today he self-identifies as black. Recounting for me the details of his personal transformation, Jorge explains that growing up, he never thought much about himself in racial terms, *per se*, but that later, while in university, he came to understand many of his past experiences as deeply racialized. In Jorge’s words, he came to “discover [him]self” as black.¹

Tiago, also a university student in Recife, tells a similar story. Like Jorge, Tiago reports that he is classified as white on his birth certificate but today identifies as black. Tiago, however, explains that his racial transformation took place at an event organized by the black movement in Recife—an event he was led to by friends from university. There, Tiago heard anecdotes and experiences of racism recounted by movement activists. He tells me he was surprised by how much their stories resonated with him, leading him to ask, “how had I not realized this before?” He says, “I looked back and said ‘jeez, that all happened to me because I was black. Because I *am* black.’ It was really just like that. It was a discovery.”²

The racial trajectories of these two young men are remarkable and unremarkable in Brazil, where the fluidity and ambiguity of racial boundaries have long enabled individuals to change their racial self-identifications, that is, to reclassify. Such boundary-crossing was not only permitted, but commonplace. Yet it is the very history of boundary-crossing that also makes these accounts unexpected. For while Brazil is known for racial fluidity, it is also known for racial stratification and veiled racism, which have been said to incentivize Brazilians to reclassify toward whiteness, when possible.

¹ Author interview, Recife, Brazil, July 12 and 25, 2017. All names of interviewees are pseudonyms.

² Author interview, Recife, Brazil, July 5, 2017.

Not so since the early 2000s. In more recent years, many Brazilians like Jorge and Tiago have come to demonstrate a marked and increasing tendency to reclassify toward *blackness*. Figure 1 shows the racial composition of Brazil from 1992 to 2014, as determined by the census bureau. Indeed, between the 2000 and 2010 censuses, Brazil's population turned from majority to minority-white—a sudden structural shift that, as we will see, is unaccounted for by demographic trends or changes in census enumeration practices. Instead, what has become clear is that Brazilians are increasingly adopting the stigmatized labels of blackness.³

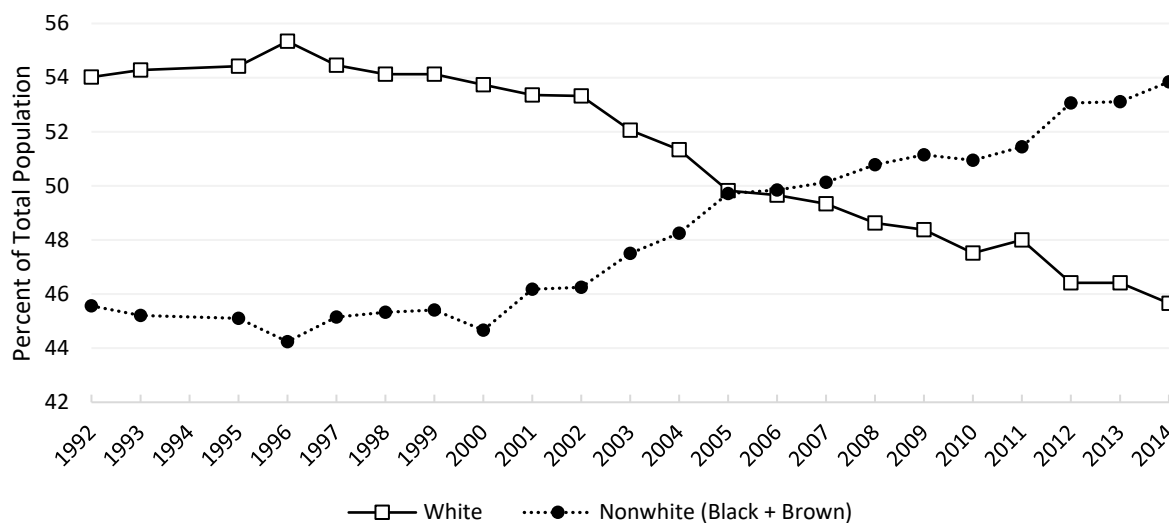


Figure 1 Racial Composition of Brazil, 1992-2014. Source: *Pesquisa nacional de amostra de domicílios* (PNAD); *Instituto brasileiro de geografia e estatística* (IBGE).

This article leverages the sudden reversal in patterns of racial reclassification as a rare opportunity to shed new theoretical light on the processes of identity politicization. Empirically, its purpose is to explain why Brazilians are increasingly adopting nonwhite identities, why so suddenly, and why in apparent defiance of the conventional wisdom that reclassification occurs toward whiteness. In so doing, this study contributes to the broader theoretical agenda of

³ Soares 2008; Marteleto 2012; Miranda 2015. A large literature discusses differences between official census and colloquial racial categories/labels in Brazil (see Telles 2004; Bailey 2009). In this article I focus on self-identification in terms of census categories for practical and empirical reasons, not as singular measures of racial identity.

understanding the “identity-to-politics link,” that is, the processes that lead from social categories to politicized identities to group politics.⁴ In particular, this study focuses on one element of these processes, the formation of a group consciousness that shapes one’s understanding of power, what I will refer to as political identity.⁵ Despite calls from scholars to better understand the ways identities “harden, congeal, and crystallize,”⁶ we possess relatively few empirical and systematic analyses of the processes of political identity formation at the individual level. This study aims to fill this gap and draws attention to the ways in which recent efforts at educational expansion have reshaped individuals’ self-understandings, led them to cross previously recognized social boundaries, and imbued newfound identities with political meaning.

Drawing on extensive field research and systematic quantitative analyses, I argue that this reversal in patterns of reclassification is the consequence of expanded access to education, which has unintentionally led many Brazilians to develop racialized political identities. State-led efforts to better include “outsider” citizens through social policy expansion have unleashed unprecedented waves of upward mobility for the lower classes,⁷ many of whom have options in their racial identifications and who are traditionally susceptible to practices of whitening. Greater access to secondary and university education, in particular, has increased these newly mobile citizens’ *exposure* to information, social networks, and the labor market. Increased exposure, in turn, has led many to come face-to-face with racialized inequalities in their pursuits of upward mobility, altering the sets of personal experiences that inform their racial identifications and political

⁴ Lee 2008.

⁵ This conceptualization is inspired by Cramer 2016, which emphasizes how social categories operate as a lens for making sense of power. Her study focuses on distributive justice, but my conceptualization focuses on individuals’ group-based perceptions of power, broadly defined. For a full elaboration see De Micheli 2018. For alternative conceptualizations, see Smith 2004; Huddy 2013.

⁶ Brubaker and Cooper 2000, 1; see also Smith 2004.

⁷ Garay 2016; Neri 2011.

identities. Brazilians are increasingly choosing and politicizing blackness, then, as an articulation of these newfound and racialized political identities.

The account of identity politicization I advance in this article marks a departure from dominant theories, which have coalesced around instrumentality. Whether via mobilization from above,⁸ from below,⁹ or simply as a political means to a material end,¹⁰ scholars have come to focus on incentives and institutions as the primary determinants of the identities politicized and articulated in various political arenas. Those familiar with Brazil will quickly point out that, at first glance, such accounts seem to explain the Brazilian case too, since in recent years the country began experimenting with race-targeted affirmative action policies.¹¹ To be sure, journalistic accounts often cry foul of the incentives for blackness and the so-called fraud these policies generate. Yet as we will see, such crude instrumental motivations struggle to account for long-term identity change in this context of racial fluidity and stigmatized blackness—that is, given the very conditions and social forces that have long disincentivized blackness in the first place. Instead, the argument I develop focuses on how the state’s allocation of education, a key right of social citizenship,¹² can empower citizens to challenge social hierarchies and articulate stigmatized identities in the political arena. In other words, my account draws attention to the ways that citizenship institutions (the accessibility of education) can interact with social structures (social hierarchies and inequalities) to shape the microlevel processes of identity formation and politicization.

⁸ Posner 2005; Huber 2017.

⁹ Yashar 2005.

¹⁰ Nagel 1986; Laitin 1998; Chandra 2004; Chandra 2005.

¹¹ Htun 2004; Paschel 2016.

¹² Marshall 1950, 25.

The Brazilian case is particularly well positioned to offer insights into political identity formation. To the extent Brazil has appeared in the literature on ethno-racial politics, scholars have noted the weak politicization of racial differences.¹³ Indeed, Brazil is typically analyzed as a puzzling case for the relative *absence* of racial politics, which demands explanation or offers crucial variation on a variable of interest.¹⁴ Scholars agree that race has been politically relevant in Brazil only insofar as elites have disarticulated racial differences by constructing a racially inclusive nation that whitewashes Brazil's history as the single-largest and longest-running participant in the slave trade, as well as the legacies of slavery for understanding present-day inequalities.¹⁵ Previous scholarship suggests, therefore, that this is an unlikely case for the formation of political identities rooted in *racial* categories of social membership. At the same time, however, the fluidity of racial boundaries renders the Brazilian case a "region of exception" where such identity change is not only possible on a widescale, but possible to empirically and systematically detect.¹⁶

This article proceeds as follows. Section 2 motivates the puzzle by laying to rest explanations based on demographic trends and census practices. It then emphasizes that conventional wisdom would expect reclassification toward whiteness. Section 3 elaborates the political identity hypothesis introduced here and illustrates mechanisms with in-depth qualitative data collected over 15 months from distinct and the two largest geographic regions of Brazil. It then elaborates a rival instrumental hypothesis based on the implementation of race-targeted affirmative action policies. Section 4 systematically tests the political identity hypothesis with a longitudinal analysis of microlevel census data. Section 5 tests the instrumental hypothesis with

¹³ Bueno and Dunning 2017; Hanchard 1994; Yashar 2005.

¹⁴ Hanchard 1994; Marx 1998; Lieberman 2003; Lieberman 2009.

¹⁵ Hanchard 1994; Marx 1998; Andrews 2004; Loveman 2014.

¹⁶ Pepinsky 2017.

two originally designed survey experiments. Section 6 addresses final alternative explanations, and section 7 concludes.

II. The Puzzle of Racial Reclassification

Given Brazil's fluid racial boundaries, apparent patterns of reclassification might be dismissed as products of changing classification schemes or intergroup differences in demographic trends.¹⁷ Over the period in question, however, practices of racial classification employed by the census bureau have remained unchanged. And there is no demographic trend that would produce such a sudden shift in racial composition: international migration is virtually nonexistent; nonwhite mortality rates *exceed* white mortality rates; and though fertility rates are higher among nonwhites, this gap has been narrowing for decades, suggesting the relative proportion of nonwhites ought be declining.¹⁸

Category	2000	2010 (aged 10+)		Enumerated - Projected	% Difference from projected
	Enumerated	Projected	Enumerated		
White	92.0	88.1	77.8	-10.3	-12
Brown	65.8	62.6	68.8	6.2	10
Black	10.6	9.9	13.0	3.1	31

Table 1. Estimates of Inter-Census Racial Reclassification, 2000-10.

Source: Miranda 2015

Demographic analysis confirms that significant reclassification toward blackness indeed occurred. Table 1 compares the populations enumerated in the 2010 census to those projected for that year based on demographic trends in the 2000 census. Estimates from this rigorous demographic analysis reveal that the enumerated white-identified population was 12 percent smaller, and brown and black-identified populations were 10 and 31 percent larger, than

¹⁷ Studies have shown that in Brazil racial identification is sensitive to the classification scheme employed and to whether race is captured via self-identification. E.g., Bailey and Telles 2006; Loveman, Muniz, and Bailey 2012.

¹⁸ See Appendix A for detailed information on census practices and demographic statistics.

demographic projections anticipated.¹⁹ The question, therefore, is not *whether* Brazilians are reclassifying toward blackness, but *why*.

This question is sharpened by the fact that reclassification is not itself a new phenomenon.²⁰ High rates of miscegenation and the absence of racial group membership rules produced a fluid system of classification in which Brazilians self-identify according to flexible phenotypic criteria rather than rigid descent rules.²¹ Brazilians possess rich lexicons to characterize racial (or “color”) differences, including labels that deviate from official census categories.²² Moreover, the subjective understanding of race is intertwined with notions of class, often referred to as “social race.”²³ As Silva describes, “given some phenotypic combination, the higher the socioeconomic position of the individual at the moment of classification, she will be classified that much closer to white.”²⁴ This complexity and ambiguity, therefore, allows individuals to place themselves in categories different from those ascribed to them, as well as to reclassify themselves over time.

But to the extent that reclassification occurred in the past, it reflected a practice known as “whitening.” Conventional wisdom holds, and empirical analyses have shown, that traditionally Brazilians capitalize on racial fluidity to reclassify in *lighter* categories.²⁵ Indeed, anthropology and sociology are replete with examples documenting this phenomenon, perhaps best captured in the adage “money whitens.”²⁶ Thus given this context, an individual’s racial self-identification may indicate genuine self-conception, but it may also indicate a strategy of attempting to evade

¹⁹ Miranda 2015. Also see Soares 2008. For more on within-cohort differences between 2000 and 2010 censuses, see Appendix Figure A2.

²⁰ Wood and Carvalho 1994; Carvalho, Wood, and Andrade 2004.

²¹ Nogueira 1998; Telles 2004.

²² Telles 2004.

²³ Wagley 1965; Silva 1994.

²⁴ Silva 1994, 70.

²⁵ For microlevel analysis, see Silva 1994; Telles and Lim 1998; Telles 2004. For macrolevel analysis, see Wood and Carvalho 1994; Lovell 1999; Carvalho, Wood, and Andrade 2004.

²⁶ Silva 1994; Schwartzman 2007; Harris 1952, 60.

the stigma associated with blackness. In other words, whitening allows individuals to attempt to “avoid identification with the lowest echelon of the social order,”²⁷ inevitably reproducing racial hierarchies by implying through behavior that whiteness is preferred.

The idea that racial identification in Brazil can reflect a stigma-minimizing strategy finds broad support. Carl Degler famously referred to mixed-race identification as an “escape-hatch.”²⁸ And ethnographers have long documented the ways darker-skinned Brazilians are socialized to internalize racial hierarchies, even by their families.²⁹ “Afro-Brazilians,” writes Hordge-Freeman, “engage in racial bargains, compromises that are often made ambivalently, in which [they] may comply with racial hierarchies in exchange for perceived payoffs that may be political, economic, psychological, or even affective.”³⁰ Moreover, not only have scholars documented rampant discrimination against the darker-skinned for decades,³¹ but recent analyses reveal that Brazilian parents are more likely to invest in education for their lighter-skinned children,³² and that Brazilians earn higher wages when their employers perceive them as lighter-skinned.³³

There are considerable incentives, therefore, for the potential targets of racialized discrimination to approximate whiteness and comply with racial hierarchies. Table 2, which cross-tabulates respondents’ self-classifications in official census categories with the classifications assigned to them by survey interviewers, demonstrates how these incentives have indeed shaped patterns of racial identification. The likelihood of category mismatch increases monotonically as one moves from white to black; among those classified as brown by interviewers, mismatched respondents are twice as likely to opt for a lighter, rather than darker, category; and nearly 10

²⁷ Harris 1952, 60.

²⁸ Degler 1971.

²⁹ Twine 1998; Sheriff 2001.

³⁰ Hordge-Freeman 2015, 6.

³¹ E.g., Hasenbalg 1979; Lovell 1999; Telles 2004; Telles 2014.

³² Rangel 2015.

³³ Cornwell, Rivera, and Schmutte 2014.

percent of those classified as black self-classify as white, compared to almost none of those classified as white self-classifying as black.³⁴

		Self-Classification			Total (%)	N
		White	Brown	Black		
Respondent as classified by interviewer	White	87.34	12.45	0.21	100	474
	Brown	23.62	64.47	11.91	100	470
	Black	9.76	31.71	58.94	100	123
Total (N)		537	401	129	-	1,067

Table 2. Racial Classification Mismatch Indicates Whitening. Source: *Pesquisa Social Brasileira*.

It is clear that whitening was the dominant trend at the time of this survey. But also clear is that many Brazilians have racial options. Among them are “exit” and “voice.” Conventional wisdom leads us to expect racial exit: self-whitening and compliance with racial hierarchies to “defend [one’s] welfare or to improve [one’s] position.”³⁵ Social identity theory too predicts exit, when possible, from those social categories that do not contribute positively to the individual’s self-concept.³⁶ More recent patterns of reclassification toward blackness, by contrast, suggest that Brazilians are increasingly defying the social forces and commonsense logics that incentivize whiteness. Recent patterns, therefore, present a puzzle that conventional wisdom neither anticipated nor can explain: Brazilians are seemingly and increasingly opting for voice over exit.

III. Theory and Hypotheses

Racial Reclassification as Political Identity Formation

I argue that the sudden reversal in patterns of reclassification is the unintended consequence of expanded access to education, which has led many lower-class citizens—many of whom have racial options and who are susceptible to the practices of whitening—to develop racialized political

³⁴ For more on mismatch, see Telles 2004, chap. 4; Silva 1994; Bailey 2009; Telles and Lim 1998.

³⁵ Hirschman 1970, 15.

³⁶ Tajfel 1974, 69.

identities and choose blackness. The Brazilian state played an important, if indirect and unintentional, role in inducing these microlevel patterns through unprecedented efforts to include “outsider” citizens via social policy expansion. As Garay argues, the lifting of literacy requirements for political citizenship in Brazil’s 1988 constitution increased political competition for the votes of the poor.³⁷ Electoral incentives, paired with the codification of universal social rights, helped generate the political will for politicians on the right and left to create, expand, and reform social policies and programs for the poor, unleashing an impressive wave of upward mobility for lower-class sectors.³⁸ In the 1990s, federal educational reforms, in particular, included a new national education curriculum, mandated spending floors at the state level, federal funds to supplement under-resourced localities, the allocation of local resources based on student enrollment rather than local discretion, and new channels of resource delivery to circumvent political bargaining between state and local governments.³⁹ In the 2000s, education spending reached OECD levels, and leftist governments, bolstered by auspicious economic conditions, expanded public universities, created scholarship and financial aid programs, centralized the university entrance exam, and sought to explicitly include marginalized groups in higher education through means and race-targeted affirmative action policies.⁴⁰

³⁷ Garay 2016. Also see Hunter and Brill 2016 on advances in social protection and Loveman 2014 on the state’s shifting stance toward race as a function of its goals of modernization and development.

³⁸ Neri 2011.

³⁹ Melo 2017.

⁴⁰ Lima 2010; Gomes and Moraes 2012; Artes and Ricoldi 2015; Heringer 2015.

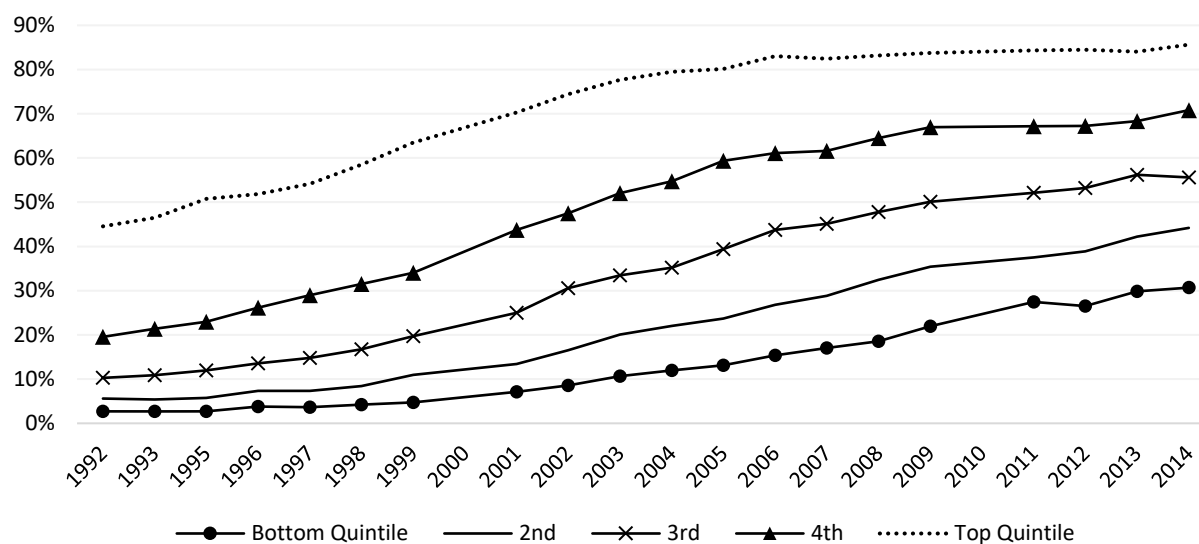


Figure 2. Brazilians aged 18-24 with high school completed by Income Quintile, 1992-2014.
Source: PNAD.

These reforms led to marked improvements in student performance and attendance,⁴¹ as well as the accessibility of secondary and university education.⁴² Indeed, over this period economic activity among the high school-aged fell by half, signaling greater commitment to education in younger cohorts,⁴³ and education completion rates are higher than ever. Figure 3, which displays high school completion rates by income quintile, shows significant gains in secondary completion from 1992 to 2014. Particularly striking are gains in the bottom quintile, which registered a tenfold increase from 3 percent completing high school in 1992 to 30 percent in 2014. Among those in the middle-income quintile, high school completion rates increased from a mere 10 percent in 1992 to 55 percent by 2014.

⁴¹ World Bank 2002; INEP 2016.

⁴² Artes and Ricoldi 2015; Gomes and Moraes 2012.

⁴³ Melo 2017.

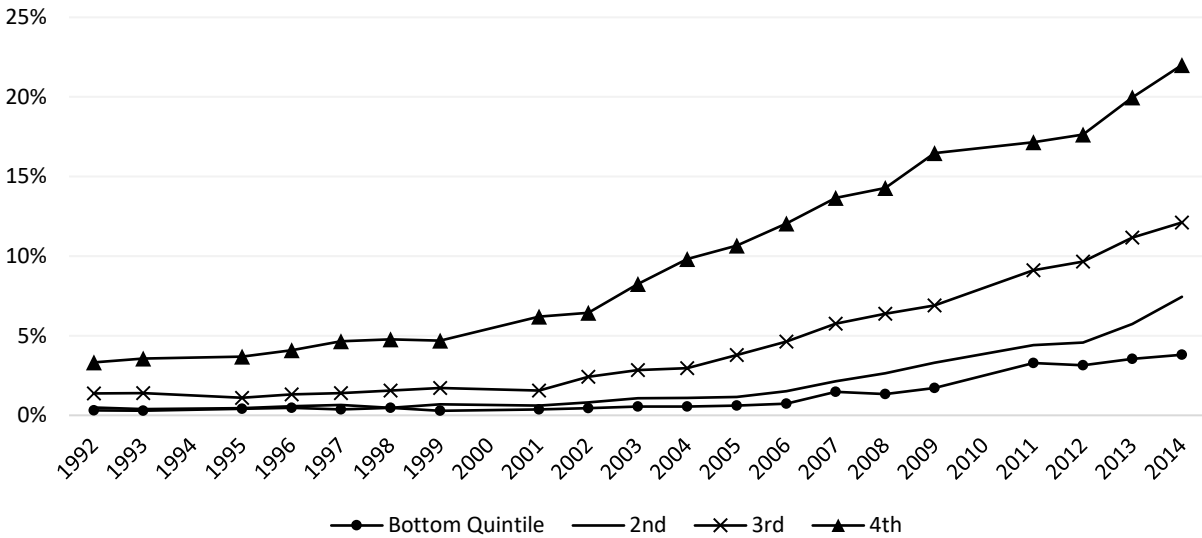


Figure 3. Brazilians Aged 18-24 with Some University Education by Income Quintile, 1992-2014. Source: PNAD. Top quintile, which has far and away the greatest university access, removed for the sake of visibility.

Figure 4 shows similar trends for university access. Evident again are notable increases for all income levels, particularly in the 2000s. To be sure, access to university among the lowest quintiles remains modest; but considering that in 1992 these sectors saw virtually no access whatsoever, recent gains represent remarkable improvements for even the most disadvantaged. Individuals in the middle quintile, moreover, saw their access increase more than tenfold over this period, from roughly 1 to 12 percent. Of course, because of the ambiguity and instability of racial identification, we can only assume that the inclusion of lower classes has meant better representation of the darker-skinned in education, as research would indicate.⁴⁴ Nevertheless, indisputable are the unprecedented gains in educational access for the lower classes in recent decades.

⁴⁴ Telles 2014.

Microlevel Mechanism: Education as Exposure

Scholars have long linked education to various political attitudes and behaviors. Building and expanding on Kruks-Wisner, who emphasizes the role of social and spatial exposure in shaping the exercise of citizenship,⁴⁵ I argue that education too can operate as a form of exposure and play a role in reshaping individuals' racial self-understandings and the political meaning of these identities. Individuals, of course, pursue education for decades on end and with a variety of motivations, not least of which is upward mobility in and of itself. But particularly for individuals from lower-class backgrounds, who previously saw scant educational access and who are often subject to (and might even participate in) informal institutional racism, unprecedented access to education can also entail sudden exposure to new information, social networks, and/or experiences in the labor market (each of which I elaborate on below). These new forms of exposure, I argue, can alter the personal experiences that inform individuals' identifications and political identities.

The notion that education and upward mobility can shape the nature of racial identities builds on findings on racial consciousness in the United States. Following the civil rights movement, scholars found—contrary to expectations—that upward mobility deepened blacks' racial consciousness. Indeed, it was the growth of the black middle class that gave rise to Dawson's seminal notion of “linked fate,”⁴⁶ as well as to Hochschild's finding that middle-class blacks were more pessimistic than their lower-class counterparts about the reality of the American dream, despite having supposedly fulfilled its promises.⁴⁷

Black Americans, of course, are emblematic of group consciousness.⁴⁸ And though conventional wisdom emphasizes that “money whitens” in Brazil, more recent scholarship has

⁴⁵ Kruks-Wisner 2018.

⁴⁶ Dawson 1995.

⁴⁷ Hochschild 1995. See also Tate 1994.

⁴⁸ Shingles 1981.

begun to uncover correlations that lend support to this argument. Telles and colleagues, for example, find that better educated Brazilians are most likely to identify as black rather than mixed-race,⁴⁹ even when controlling for physical attributes.⁵⁰ Studies of parents' classifications of their children find that better educated nonwhite Brazilians were more likely to classify their children as white in the 1980s and 1990s, but that this relationship had reversed by the 2000s.⁵¹ And a panel study of students at one university in Brazil finds that students are more likely to adopt black identities after enrolling in university, particularly those admitted via affirmative action.⁵²

Few studies examine temporal dynamics in racial identification in Brazil, and others only speculate on why education might correlate with black identification. My account specifies and elaborates the mechanisms that link education to increased black identification over time. I develop this hypothesis based on insights from 15 months of qualitative field research, including participant observation and in-depth interviews conducted with Brazilians of various educational attainments and sampled from university networks and community organizations in São Paulo and Recife, two major cities located in distinct geographic regions of Brazil.⁵³ Interviewees were snowball sampled and are thus not intended as tests of the theoretical propositions (systematic analysis follows in Section 4). Instead, these data provide detailed insight into microlevel processes and illustrate the mechanisms linking education to reclassification and political identity formation: new and increased exposure to information, social networks, and the labor market.

Information

⁴⁹ Bailey and Telles 2006; see also Mitchell-Walthour 2018.

⁵⁰ Telles and Paschel 2014.

⁵¹ Schwartzman 2007; Marteleto 2012.

⁵² Francis-Tan and Tannuri-Pianto 2015.

⁵³ See Appendix B for more on sampling and methods sequencing. The cities are located in and broadly representative of the two most populous geographic regions: São Paulo in the southeast and Recife in northeast.

First, education can increase exposure to information, which can reshape racial identities by raising awareness of racialized inequalities and discrimination and their historical origins. In her study of black public opinion in the U.S., for example, Tate finds that better educated blacks have greater racial consciousness and suggests this is because they are more aware of racialized inequalities.⁵⁴ In the Brazilian case, scholars have indirectly pointed to information as one explanation for the puzzling absence of politicized racial differences. Hanchard and Marx, for example, describes Brazil's myth of racial unity and official history (which emphasize race mixture and downplay slavery) as two obstacles to building racial consciousness in the country.⁵⁵

Reports from interviewees support these claims. Many lesser educated interviewees reported, for example, that they had not known of the historical existence of slavery nor the arrival of Africans to the continent via the slave trade. After hearing about slavery at a community organization she frequented, one interviewee tells me: "I didn't know about that slavery thing. I used to see it in soap operas, you know...But I didn't know they had it for real, that there was this thing of blacks suffering so much."⁵⁶ Another interviewee, a university student, reports that she learned little about slavery before university, saying "I just learned that blacks were enslaved and they [were beaten] and that's it....We learn that [slavery was peacefully abolished] and full stop."⁵⁷

Greater exposure to information can thus challenge commonsense regarding the historical irrelevance of race and potentially alter individuals' views of present-day inequality and discrimination. Another interviewee, who reports that he developed a politicized black identity while in university, attributes this politicization to precisely this form of exposure in university history courses, saying "I knew that slavery happened, but I didn't know how. I didn't know how

⁵⁴ Tate 1994, 28.

⁵⁵ Hanchard 1994; Marx 1998; also see Twine 1998.

⁵⁶ Author interview, Recife, July 18, 2017.

⁵⁷ Author interview, São Paulo, January 30, 2017.

much its legacy exists today. You learn what happened, but a lot of times it's that 'the past is just the past' and has no legacy today, or it's very little. We just think 'oh, that's alright, that was the past and it's not like that anymore.' But there is a great legacy from this now.”⁵⁸ Information, then, is one pathway through which education can lead individuals to adopt and politicize black identities.

Social Networks

Pursuing education can also lead individuals to new contacts and networks, which insert individuals into new spaces and introduce them to alternative worldviews, what social movement scholars call “interpretive frames.”⁵⁹ University campuses in particular are locales with high concentrations of wealth and whiteness—something that can become blatantly clear when arriving from a poor, marginal community.⁶⁰ Campuses are also organizational centers for social groups and associations. New contacts and networks may then introduce individuals to other civic or movement organizations and expose them to interpretive frames that challenge commonsense, what McAdam describes as “cognitive liberation.”⁶¹ In her study of the pro-life movement in the United States, Munson challenges the idea that preformed ideological commitments lead to social movement participation, instead showing that participants often adopt ideologies after exposure through pre-existing social contacts.⁶² This finds support in Mische’s accounts of activist networks in Brazil. In one case, Mische describes an activist who developed a politicized racial identity by engaging in activism that was not explicitly race-based, but through which he encountered racial

⁵⁸ Author interview, São Paulo, December 23, 2016.

⁵⁹ Snow et al. 1986.

⁶⁰ Artes and Ricoldi 2015.

⁶¹ McAdam 1982.

⁶² Munson 2010.

discourse and debate that resonated with him.⁶³ Civic and social movements spaces of all kinds, therefore, can be important locales where individuals first discover and then develop racialized political identities; pursuing education can be the first step in altering the social contacts and networks that lead to this exposure.

Interviewees discussed explicitly how pursuing education indirectly increased contact with social movements. Tiago, whom we met in this article's introduction, attributes his politicized black identity and reclassification to the social movement event he arrived to inadvertently by socializing with friends. Another interviewee in Recife, who gained exposure to the black movement through university contacts, links her reclassification to overcoming her own dislike for her natural hair, saying "when I started to participate in [movement] spaces and I started to also see other girls with the same hair as mine—a lot of women were assuming their hair and I started to see them and frequent those spaces. So I started to like it and I started to assume [my natural hair]."⁶⁴ Pursuing education can alter individuals' social contacts and networks, which in turn introduce them to new interpretive frames that can alter their self-understandings.

The Labor Market

Finally, certainly not everyone who pursues greater education takes an interest in history or participates in social movements, but education can also affect racial and political identity by altering one's experiences in the labor market. As a promised pathway of upward mobility, greater education often leads individuals to compete for higher status jobs—which they may or may not attain—potentially exposing them to exclusivity, inequality, or discrimination. Analyses of racial

⁶³ Mische 2008, chap. 8.

⁶⁴ Author interview, Recife, March, 30, 2017. See also Hordge-Freeman 2015 on the role of hair and aesthetics in racial socialization in Brazil.

discrimination document the greatest wage penalties against the darker-skinned in high-status jobs.⁶⁵ As one ascends socially with greater education, moreover, it becomes increasingly difficult to attribute any perceived discrimination or one's relative social position to class or status.⁶⁶ For many Brazilians with racial options, higher education may not bring economic success, generating grievances; or, alternatively, those who succeed may find themselves suddenly thrust into elite and largely white spaces. Education, then, can significantly alter one's personal experiences and perceptions of discrimination in the labor market and consequently their racial identifications.

Several interviewees echoed these experiences in explaining their reclassification and politicized racial identities. One interviewee in Recife, for example, attributed this to his experience working as a high school teacher, a position that ought to have endowed him with respect and authority, but that was not granted by other school employees or his students:

Teaching did that to me. It provoked me toward this because the students, on the first day of class they didn't think I was a teacher...because I was black...It's linked to teaching, [what] made me realize how black I was and [what] closed that cycle of what we in the movement today call empowerment. Of understanding blackness as a political position. It was above all my experience as a teacher that led me to this. And so I start[ed] to look at my past and see "oh, I was the only one [there] teaching while black."⁶⁷

Another interviewee in São Paulo, who experienced impressive upward mobility due to her university education, discussed her exposure to white overrepresentation in elite public spaces that came suddenly with greater disposable income:

[Working] at the bank...I think the process was more difficult because you're more alienated, you know? In relation to this, because there you start to live another way of life, you know? So, for example, when I entered the bank, I think I escaped the cycle of economic violence. Obviously the racial [cycle] I can never escape, but from the economic [cycle] I think I escaped from the moment that I started to earn more [money], frequent other places. And then you start to notice, like...we go to some places, there are no black people. You go to another, no black people. You got to a restaurant, no black people. You get on a plane to go to Europe, almost no black people. Families of all black people? Impossible, depending on the destination.⁶⁸

⁶⁵ Lovell 1999; Lovell and Wood 1998; Soares 2000; Campante, Crespo, and Leite 2004.

⁶⁶ Silva and Reis 2011; Souza 1983.

⁶⁷ Author interview, Recife, July 22, 2017.

⁶⁸ Author interview, São Paulo, December 15, 2016.

By altering individuals' personal experiences in the labor market, education can also operate more indirectly to reshape racial and political identities.

In sum, the specific pathways through which education affects reclassification and the formation of racialized political identities are heterogeneous and often personal, and the effects of education unfold over varying periods of time. The point is that the pursuit of greater education, directly and indirectly, alters the sets of personal experiences⁶⁹ that inform individuals' racial identifications and political identities. The key observable implication of this hypothesis is that better educated Brazilians, in particular those from lower-class backgrounds, will be the most likely to reclassify toward blackness over time.

Affirmative Action and the Instrumental Hypothesis

Skeptics will quickly point out that over this period Brazil began experimenting with race-targeted affirmative action, an institutional change that generated incentives for blackness. In 2001, then-president Fernando Henrique Cardoso broke with the state's decades-long posture of colorblindness when he explicitly endorsed affirmative action for Afro-descendants.⁷⁰ Federal affirmative action legislation was not passed until 2012, though states began implementing racial quotas in state universities as early as 2001.⁷¹ These policies targeted the absence of nonwhites and the lower classes in public universities, which had remained the near-exclusive domain of white elites.⁷² University quotas remain the dominant form of affirmative action policy in Brazil,

⁶⁹ Sheriff 2001; Mitchell-Walthour 2018.

⁷⁰ Htun 2004; Paschel 2016.

⁷¹ Rio de Janeiro was the first state to implement university quotas for Afro-descendants (though not exclusively), first in select universities in 2001 (law 3.708/2001), then in all state universities in 2003 (law 4.151/2003).

⁷² Artes and Ricoldi 2015.

though in reality the majority of these policies are means-tested, and most policies target race only in conjunction with socioeconomic criteria.⁷³

Nonetheless, affirmative action policies comport with dominant theories, which attribute identity change and salience to material incentives generated by demographic structures and/or institutions.⁷⁴ Indeed, “institutions that structure incentives” is one prototype of identity change outlined by Chandra.⁷⁵ In this view, the high or low salience of identities is the product of means-ends calculations in contexts of resource scarcity.⁷⁶ Affirmative action has featured explicitly in this literature. Nagel, for examples, argues that affirmative action incentivized Native American identification in the United States,⁷⁷ and Chandra argues that in India these policies created incentives for ethnic groups to mobilize and demand inclusion as policy targets.⁷⁸

Though instrumental explanations are attractive for their parsimony, they struggle to explain the enduring identity change evident in the census. First, affirmative action benefits are not awarded based on responses in the census, which are anonymous by law. Second, the adoption of affirmative action has not eliminated the status quo incentives for whiteness that are perpetuated through informal institutional racism. Fluid boundaries allow savvy opportunists who wish to take advantage of these policies to manipulate their declared race when and where necessary while otherwise reaping the rewards of whiteness. And third, the misuse of affirmative action carries real risks. Implementing these policies in a context of such racial ambiguity has undoubtedly raised thorny questions of where to draw “the color line.”⁷⁹ Some universities have created councils to

⁷³ Schwartzman and Paiva 2014.

⁷⁴ Laitin 1986; Laitin 1998; Chandra 2004; Posner 2005; Huber 2017.

⁷⁵ Chandra 2012.

⁷⁶ See Yashar 2005 for an incentive-driven, but not materialist, argument.

⁷⁷ Nagel 1986.

⁷⁸ Chandra 2005.

⁷⁹ Schwartzman 2008; Bailey 2008.

determine the eligibility of those applicants tentatively admitted via racial quotas.⁸⁰ Yet even without such councils, students deemed guilty of fraud can face expulsion.⁸¹

There is empirical support for these misgivings. In panel studies of university students before and after the implementation of quotas, Francis-Tan and Tannuri-Pianto find evidence that applicants manipulate their identifications for admission, but that students are likely to revert to lighter identification after matriculation.⁸² These studies also reveal that darker-skinned students in particular are more likely to reclassify toward blackness *after* matriculation, and that they were likely to adopt the colloquial black label *negro* (promoted by the black movement) within five years of completing university, suggesting motivations beyond crude instrumentality.⁸³

But despite these misgivings, the instrumental hypothesis merits assessment. Of course, the two hypotheses are not mutually exclusive; individuals can behave similarly for different reasons. Nonetheless, in my analyses I will test this rival hypothesis as a plausible explanation for the reclassification evident in the census, rather than probe for evidence of instrumental behavior writ large.

IV. Longitudinal Analysis: Testing the Political Identity Hypothesis

The key observable implication of the political identity hypothesis is that better educated Brazilians will be most likely to reclassify toward blackness over time, especially those in lower classes. Ideally this would be tested with microlevel panel data allowing for repeated observations of individuals' identifications over the relevant time period. In the absence of such data, I test this

⁸⁰ Oliveira 2016; Sperb 2017; *Globo* 2017.

⁸¹ E.g., Martins 2018.

⁸² Francis and Tannuri-Pianto 2012; Francis and Tannuri-Pianto 2013. Senkevics 2017 finds that repeat-enrollers in the university entrance exam alter their identifications, not always toward blackness.

⁸³ Francis-Tan and Tannuri-Pianto 2015. Also see Schwartzman and Silva 2012 on consciousness-raising as a goal of affirmative action held by university administrators.

hypothesis with “pseudo-panel” analysis, which has become common in social analysis following Angus Deaton’s pioneering application.⁸⁴ In many cases, researchers are interested in testing hypotheses that require panel data but have at their disposal only successive surveys with random samples drawn anew. Such surveys allow researchers to construct synthetic panels and generate estimates of aggregated individual-level behavior by tracking cohorts, defined as groups with fixed membership over time. In my application, I track birth cohorts in annual household surveys to estimate the aggregated likelihood that individuals in birth cohorts will identify as nonwhite in successive surveys. Pseudo-panel analysis thus replaces individual-level probabilities with cohort means as indirect estimates of aggregated microlevel behavior over time.⁸⁵ (See Appendix C for additional information.) I analyze the Annual Household Sample Survey (PNAD), a demographic survey conducted by the census bureau and similar to the American Community Survey. To ensure consistency in the racial classificatory scheme employed by the census bureau and to cover the relevant time period, the analysis includes surveys conducted in 1993, 1998, 2003, 2008, 2013 and in 2015, the final survey-year.⁸⁶

This strategy offers several advantages. First, as a demographic survey, PNAD offers samples large enough to compute reliable estimates for birth cohorts.⁸⁷ Second, because the first survey-year analyzed is 1992, long before affirmative action policies became a topic of national debate, the analysis can focus on individuals who completed university long before nonwhite identification offered clear incentives or benefits. If instrumental motivations alone accounted for the observed patterns of reclassification, then older cohorts—those unlikely to seek to benefit from

⁸⁴ Deaton 1985.

⁸⁵ Moffitt 1993; Verbeek 2008; Guillerm 2017.

⁸⁶ The earliest survey employing this classification scheme was conducted in 1992. The analysis begins in 1993 due to a lagged dependent variable. After 2015 the annual PNAD survey was discontinued. The survey is not conducted in census years (2000 and 2010), and was not conducted in 1994. PNAD has been conducted since the 1960s, but the classification scheme employed by the census bureau has been consistent only since the 1991 census.

⁸⁷ See Appendix C for detailed information on cohorts, sampling methods, and sampling frames.

racial quotas in university admissions—ought to demonstrate stability in their racial identifications. This approach, therefore, offers leverage on the central hypothesis by allowing me to isolate the effects of education for specific cohorts without potential inferential contamination from affirmative action policies.

Pseudo-panel analysis makes two key assumptions. First, cohorts identified across surveys ought to be based on stable membership over time. Birthyear, the criterion employed here, is a typical choice.⁸⁸ Second is that cohorts are based upon stable underlying populations.⁸⁹ This second stipulation is relevant with respect to age (used to identify cohorts) and education (the explanatory factor of interest), limiting the cohorts suitable for pseudo-panel analysis: because mortality rates spike among Brazilians above 55 years of age, the underlying population of cohorts that reach this age during the period in question is not stable;⁹⁰ and because younger individuals are more likely to gain additional education over time, educational attainment is unlikely to remain stable in younger cohorts, and thus apparent shifts might be due to changing levels of education. Analyses below therefore focus on cohorts selected to be old enough to have completed university education in 1992, but whose mortality rates had not yet spiked by the final survey-year: individuals born between 1960 and 1964 (cohort 3) and those born between 1965 and 1969 (cohort 4).⁹¹ Because we are interested in *self*-identification, the sample is also restricted to heads of household. The pooled sample for these cohorts contains 137,410 observations.

The dependent variable is measured using the official, close-ended census question, which asks respondents to self-classify as white (*branco*), brown (*pardo*), or black (*preto*). Asian and indigenous responses are excluded from analysis. I analyze a binary white/nonwhite dependent

⁸⁸ Deaton 1985; Guillermin 2017.

⁸⁹ Guillermin 2017.

⁹⁰ Appendix Table A3.

⁹¹ See Appendix Tables C1-C3 for detailed information on cohorts.

variable, collapsing black and brown categories. This coding reflects the goal of understanding reclassification *toward* blackness. In supplemental analyses I also analyze a trichotomous dependent variable.

The independent variable of interest in this analysis is education, measured as levels of formal education and categorized as follows: 1) less than primary education completed, 2) primary completed, 3) high school completed, and 4) university or more completed. In addition, the models also include controls for income, which is measured as the respondent's decile of household income per capita; and dummies for gender, and migration status at the municipal and state levels. Fixed effects for state of residence control for unobserved state-level heterogeneity. Following the pseudo-panel literature, I instrument for individual-level fixed effects with a survey-year and lagged cohort mean interaction term.⁹² Lagged-cohort means also control for autocorrelation in the dependent variable. Summary statistics for independent variables can be found in Appendix Table C4.

I estimate the longitudinal probability of identifying as nonwhite as a time-interactive, autoregressive, fixed-effects logit model of the form

$$\log(Y_{i,c,t}) = \alpha_0 + year \cdot \tau_t \cdot (\bar{y}_{c,t-1} \cdot \lambda + educ_{i,t} \cdot \gamma + \sum_k X_{i,t}^k \cdot \beta_k + \delta_{i,t} \cdot \zeta),$$

where Y is the binary variable indicating nonwhite identification for individual i in cohort c in year t . $Year$ is a survey-year fixed effect, \bar{y} is the cohort-mean lag of Y , $educ$ is the categorical education variable, X is a matrix of control variables, and δ represents state fixed effects. Because I hypothesize change over time in the relationship between covariates and the probability of nonwhite identification, the survey-year variable is interacted with the full model. In the case of binary dependent variables, models are estimated with logistic regression. Because I hypothesize

⁹² Moffitt 1993.

educational effects for particular class sectors, I estimate models on the full sample as well as subsamples based on income. Model estimates are presented in Table A1.⁹³ I focus on interpreting the substantive findings in the predicted probabilities of over-time change in nonwhite identification by level of education.

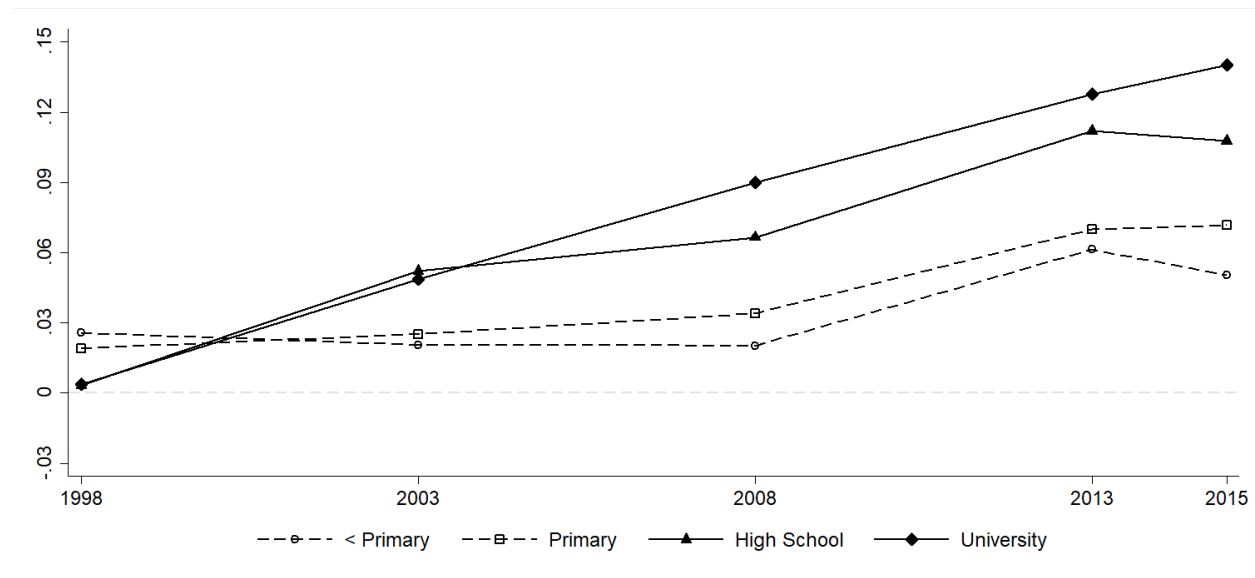


Figure 4. Change in Pr(Nonwhite ID) by Education, 1993-2015.

Figure 4 displays the substantive findings from the model estimated from the full sample and displays over-time changes in the probability of identifying as black or brown, relative to the baseline probability in 1993. As these are pseudo-panel estimates, these can be interpreted as changes in the aggregate probability that individuals in these cohorts will identify as nonwhite over time, given their levels of education. As is clear, there is a monotonic relationship between greater educational attainment and growth in the likelihood of nonwhite identification over time. For the university and high school-educated in particular, there is consistent growth. Between 1993 and 2015, this probability grew by 14 points (0.29 to 0.43, $p < .05$) for the university-educated and 11 points (0.41 to 0.52, $p < .05$) for the high school-educated (Appendix Tables C7-C8).

⁹³ Complete model estimates, predicted probabilities, and difference tests for all referenced analyses are available in Appendix Tables C5-C28.

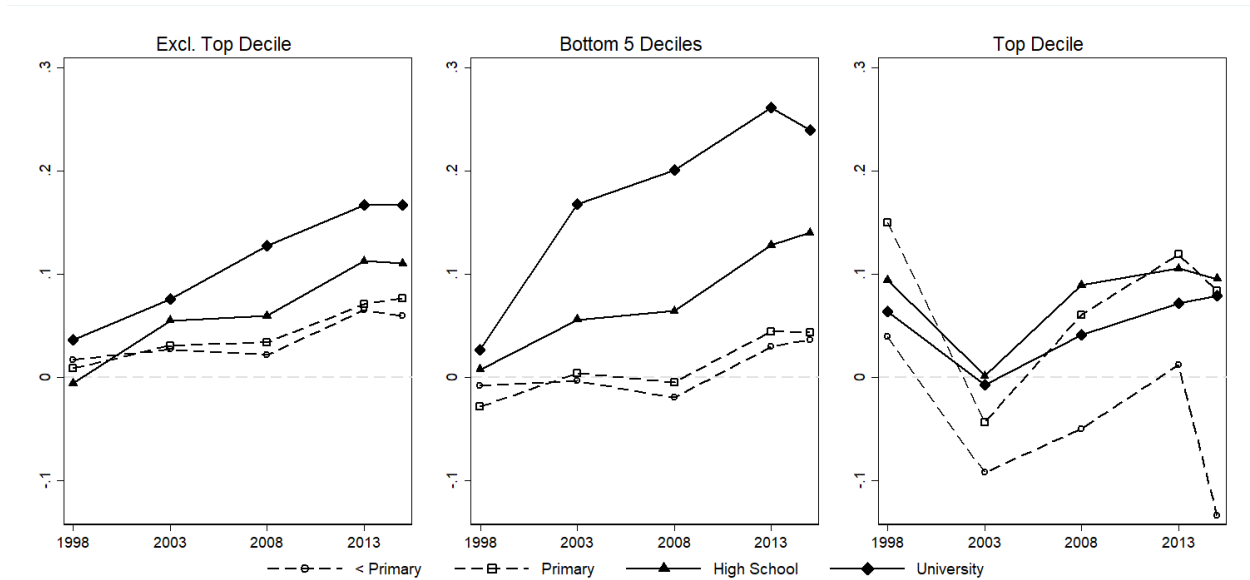


Figure 5. Change in Pr(Nonwhite ID) by Education and Income, 1993-2015.

Findings from the full analysis support the hypothesis that the adoption of nonwhite identities is associated with greater education. The hypothesis further expects the greatest tendency for reclassification among the lowest class strata. I thus estimate the model on income-based subsamples, which serves as a rough proxy for skin tone⁹⁴ and greater potential for reclassification toward blackness. Model estimates are presented in Appendix Table C9. Substantive findings are presented in Figure 5. Excluding those in the top income decile from the analysis indicates a similar longitudinal pattern as in the full sample, with a monotonic relationship between greater levels of education and the over-time change in the probability of nonwhite identification.⁹⁵ Estimating the model among the top decile alone reveals no clear education-based pattern: though there appears to be some change over time, a noisy picture emerges with no clear monotonic relationship between greater levels of educational attainment and over-time change in nonwhite identification.

⁹⁴ Telles 2014.

⁹⁵ Appendix Tables C10-C15.

Probabilities estimated on respondents in the bottom five income deciles, and those most likely candidates for reclassification, indicate that they hypothesized relationship between greater education and over-time change in the probability of nonwhite identification is particularly pronounced. Among the better educated, there are consistent and substantial gains in the likelihood of nonwhite identification. For the university educated, this probability increased by 24 points between 1993 and 2015, from 0.36 to 0.6 ($p < .05$); among the high school-educated this increased 14 points from 0.51 to 0.65 ($p < .05$). By contrast among those with primary education and less, change in this probability is statistically insignificant and estimated at 4 and 3 points, respectively.

Findings from these analyses are based on two birth cohorts chosen specifically to meet the assumption of pseudo-panel estimation and to avoid contamination from the presence of affirmative action policies. As a robustness check, I also estimate these models on an expanded dataset that includes four additional cohorts (two older and two younger). Full estimates and results from these analyses are presented in Appendix Tables C16-C25. These expanded analyses replicate the findings presented here, showing that better educated Brazilians are most likely to adopt nonwhite identities over time, in particular those from the bottom half of the income structure.

Additionally, I also conduct multinomial logit analysis of trichotomous racial identification, which reveals that the sharpest declines in white identification, and consistent increases in black and brown categories, over time occur among the better educated; and that the greatest growth over time is in identification as black, the most stigmatized racial category (Appendix Tables C26-C28). Pseudo-panel analysis of official census data, then, provides ample support for the hypothesis that the newfound tendency to reclassify toward blackness has been driven by educational expansion for the lower classes.

V. Survey Experiments: Testing the Instrumental Hypothesis

Despite evidence in favor of the political identity hypothesis, questions likely remain about whether reclassification apparent in the affirmative action era might also be driven by instrumental motivations. I assess this hypothesis with two survey experiments: first a priming experiment designed to identify if individuals manipulate their racial identifications in response to information about material incentives; and second, a list experiment to probe for evidence that individuals have in fact manipulated their identifications in the past. Experiments were conducted on stratified random samples in São Paulo and Recife, cities located in distinct but the most populous regions of Brazil. Each city is broadly representative of the region in which it is located, with oversamples of highly educated darker-skinned and lesser educated lighter-skinned respondents.⁹⁶

The Priming Experiment

The priming experiment tests the hypothesis by randomly priming respondents with information about the material benefits offered by race-targeted affirmative action policies before asking them to self-classify using the official census categories. Full text of the prime can be found in Appendix Table D2. Treated respondents were informed/reminded that the government began to reserve slots for black and brown Brazilians in university admissions and in public sector jobs. Respondents are then asked to self-classify in the white, black, brown, Asian, or indigenous categories. (Asian and indigenous respondents are removed from analysis.) The sample contains 236 control and 239 treated respondents.⁹⁷ Appendix Tables D3-D4 report balance tests across treatment conditions and summary statistics for controls.

⁹⁶ Appendix Table D1.

⁹⁷ This experiment contained two treatment arms (a modification of the design implemented in the *Pesquisa Social Brasileira*). This analysis contains half of the complete survey sample.

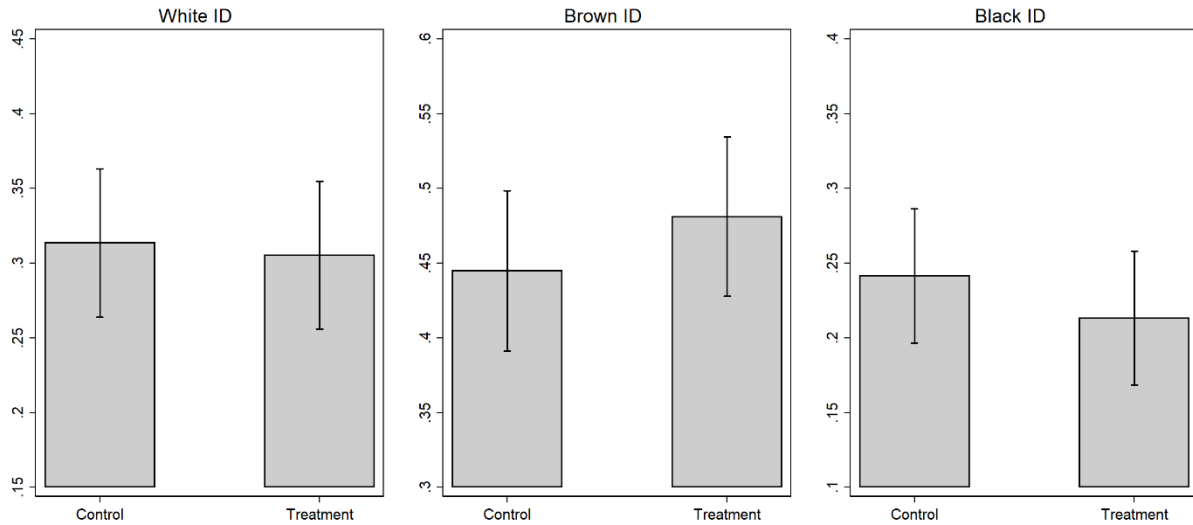


Figure 6. Mean Racial ID across Treatment Groups. The figure displays 90 percent confidence intervals.

Figure 6 displays mean probabilities of identifying in each racial category across treatment groups. Priming respondents about race-targeted quotas has substantively small and statistically insignificant effects, decreasing the estimated probability of white and black identification by roughly 1 and 3 points, respectively. The estimated probability of brown identification increases by roughly 4 percent, in the expected direction, but this change is not statistically significant. More precise covariate-adjusted estimates return similar findings (Table D5). Subgroup analyses do not reveal significant heterogeneity vary according to respondents' skin tones, as observed by survey enumerators (Table D6), nor level of education, as one might expect if those qualifying for university admission or public sector jobs might be most likely to manipulate their racial identifications for material benefits (Table D7). In only one case is there suggestive evidence of a treatment effect: the covariate-adjusted effect among the high-school educated estimates an increase in the probability of brown identification by 16 points, though this estimate is imprecise and does not reach conventional levels of statistical significance. The priming experiment, therefore, does not lend support to the instrumental hypothesis.

The List Experiment

It may nonetheless be the case that savvy opportunists know well that answers to a questionnaire will not lead to material benefits, and thus have no real incentive to alter their racial identifications in the context of a survey. Such individuals may have manipulated their identifications in the past to take advantage of quotas. Asking about these behaviors outright, of course, will likely lead to biased responses. I assess the prevalence of this behavior with a list experiment, employing a list of ethically questionable behaviors:

1. I used a fake ID to get discounts or free items
2. I used the internet to watch TV or movies without paying for them
3. I tipped a civil servant to get something I needed
4. *[I changed my declared color to qualify for a racial quota]*

Untreated respondents received the three baseline items and treated respondents received the baseline items and the fourth item. The analysis included 498 control and 495 treated respondents. Balance tests show that randomization was successful, and analysis of treatment and control groups reveals no evidence of design effects on treated respondents' responses to control items (Tables C11-C13).

I employ Imai and Blair's multivariate analysis, which leverages covariates to more efficiently estimate affirmative responses to the sensitive item and how this varies according to respondents' characteristics.⁹⁸ I include covariates for age, gender, education, and skin tone. Following Blair and Imai, I estimate both least squares and maximum likelihood models. Given concerns of fraud in affirmative action by light-skinned university applicants in particular, I leverage covariates and estimate probabilities according to education and respondent skin tone (Appendix Figures D1-D2).

⁹⁸ Blair and Imai 2012.

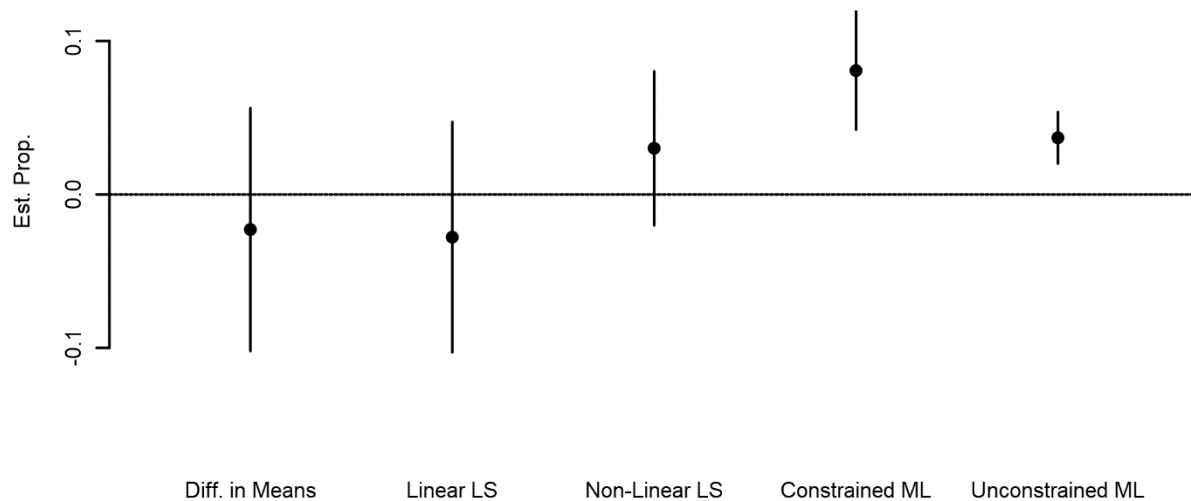


Figure 7. Estimated Proportion of Sample Responding Affirmatively to Sensitive Item.

Full model estimates are presented in Appendix Table D33. Figure 7 presents the substantive findings from these models, as well as a difference-in-means estimate. The difference-in-means estimate and linear models estimate that an insignificant proportion of respondents responded affirmatively to the sensitive item. Maximum likelihood (ML) models estimate small, but statistically significant, proportions of the sample responded affirmatively, roughly 8 and 4 percent in the constrained and unconstrained models, respectively. Multivariate analysis provides suggestive evidence of past manipulation, though these estimates are inconsistent and relatively small proportions of the sample.

Estimates from these models according to both education (Figure D1) and skin tone (Figure D2) indicate similar findings. In both cases, estimates are inconsistent across model specifications, and insignificant in linear models. Constrained maximum likelihood models indicate some heterogeneity along values of these covariates, but these patterns are model-dependent, not borne out in any other specification. Moreover, in the case of education, the relationship suggests that high-school and university-educated respondents are least likely to have manipulated their racial

identification. And even when proportions statistically distinguishable from zero are estimated, these proportions too are substantively small.

Thus multivariate analysis of the list experiment reveals that evidence in support of the instrumental hypothesis is substantively insignificant at best, and inconsistent at worst. While the list experiment hints at evidence of manipulation, it remains unclear that past manipulation of one's identification leads to sustained or long-term nonwhite identification. These findings are perhaps best read in light of the panel studies mentioned above that identify short-term opportunism among university students.⁹⁹ Savvy opportunists who wish to manipulate their identifications to take advantage of quotas likely know when and where to do so, and are well aware that they stand to gain little from their responses on any given questionnaire. This raises questions about the validity of survey experiments as tests of such behavior, but it stands to reason that such individuals also understand that their anonymous responses to census-takers similarly offer no material benefits.

VI. Additional Explanations

Foregoing analyses tested the instrumental hypothesis, but questions about other alternative explanations might linger. One such explanation is that political elites politicize or incentivize nonwhite identification through top-down mobilization. In this view, rent-seeking politicians politicize those social cleavages that minimize distributive payouts of state resources.¹⁰⁰ These explanations, however, fall short in this context. Scholars generally argue that there are few social bases in Brazil's fragmented electoral system,¹⁰¹ and that politicians instead disarticulate

⁹⁹ Francis and Tannuri-Pianto 2012, 2013; Francis-Tan and Tannuri-Pianto 2015.

¹⁰⁰ Posner 2005; Huber 2017.

¹⁰¹ Mainwaring 1999; Samuels 2006.

social differences through clientelistic politics.¹⁰² Regarding race specifically, scholars argue that Brazilian politicians are likely to lose elections if they campaign explicitly on the racial question,¹⁰³ and that insofar as politicians appeal to nonwhite constituencies, they do so implicitly.¹⁰⁴ Above all, there has been no recent pattern of top-down racial mobilization. Top-down mobilization by politicians offers little leverage on this question.

Social movements, which are said to foster collective identity formation and consciousness, offer a final potential explanation.¹⁰⁵ To be sure, Brazil's black movement occupies an important place in Brazilian racial politics and was instrumental in inducing the endorsement and passage of affirmative action legislation.¹⁰⁶ While effective in this regard, the movement has historically been regarded as unsuccessful in mobilizing the masses.¹⁰⁷ Social movements and networks are important components of my argument, of course, and many racially conscious reclassifiers have ties to social movements. It is not clear, however, that movements serve as an independent cause of widescale reclassification, rather than as a consequence of education and mechanism of exposure.¹⁰⁸

VII. Conclusion

Recent patterns of racial reclassification toward blackness mark a stunning shift in Brazil, the perennial paradox in the comparative study of ethno-racial politics. This article has shown that the sudden reversal in patterns of racial identification cannot be dismissed as artifacts of census enumeration practices, nor simply as the product of intergroup differences in demographic trends.

¹⁰² Hagopian 1996.

¹⁰³ Oliveira 2007.

¹⁰⁴ Mitchell 2009.

¹⁰⁵ McAdam 1982. Also see Caldwell 2007; Perry 2013.

¹⁰⁶ Htun 2004; Paschel 2016.

¹⁰⁷ Hanchard 1994; Burdick 1998; Marx 1998.

¹⁰⁸ Munson 2010; Mische 2008.

Instrumental explanations also fall short in explaining the adoption of sustained nonwhite identities evident in the census. Instead, I find that individuals are increasingly adopting stigmatized identities as a result of state-led educational expansion for the lower classes, which increased individuals' exposure to racialized inequalities, reshaped their racial self-understandings, and imbued these identities with political meaning.

This case underscores that structure alone is insufficient for understanding how/why identities become politicized. Brazil has long been one of the most unequal and racially stratified societies, yet one where racial identities/cleavages remained politically latent. While social hierarchies and inequalities might underpin or legitimate the politicization of certain identities, structure is no guarantee that individuals will even claim identities that coincide with discrimination or disadvantage they inevitably face, let alone politicize or articulate them in political arenas. Critical in this case were institutions of social citizenship—the accessibility of social rights and benefits allocated to citizens by the state—for understanding individual-level variation in the adoption and politicization of identities laden with social stigma. Educational access, in particular, encouraged individuals to adopt and politicize nonwhite identities as they became increasingly and personally exposed to racialized inequalities and discrimination.

This account of identity politicization is markedly distinct from dominant theories, which rely in part on strategic calculations based on demographic structures.¹⁰⁹ The empirical patterns under examination in this study ought to give us pause before placing central theoretical weight on demography. Presumptions of stable demographic structures might be valid in some contexts, but the patterns of reclassification in this case seriously complicate strategic calculations based on demography. Such presumptions, moreover, raise questions not only regarding the scope and

¹⁰⁹ Posner 2005; Huber 2017.

plausibility of theorized causal mechanisms in prior scholarship, but also regarding the compatibility of these so-called constructivist theories with fundamental and widely accepted tenets of constructivism itself. Indeed, the fact that reclassification in terms of “race,” commonly if too presumptively seen as immutable, raises such questions brings into focus how unrealistic simplifications in service of theoretical parsimony can assume away the very empirical implications of constructivism itself: that the content and nature of identities and social boundaries are subjective, mutable, and reconstructed over time.¹¹⁰ At the very least, these findings ought to renew attention to constructivist due diligence in identity politics scholarship.

This account also highlights an alternative role for the state and political elites in the processes of identity politicization. By restricting citizenship rights in the past and extending them in recent decades, political elites were indeed central to identity politicization in this case. And in reforming citizenship institutions and expanding social policies, elites were responding to electoral incentives to compete for the votes of the newly enfranchised poor.¹¹¹ There is little evidence to suggest, however, that elites engaged in the deliberate, top-down electoral mobilization of identities/cleavages that influential theories have led us to expect. Elites instead played far more indirect and unintentional roles in shaping political identity formation by unleashing waves of upward mobility for lower-class citizens. These processes, therefore, are better understood not as simple functions of elite political behavior, but rather as a kind of policy feedback effect wherein newly expanded social policies generated a new and racialized politics of identity. Elites were largely responsible for the institutional context, but individuals’ personal experiences as citizens ultimately shaped the politicization of newfound racial identities from the bottom up.

¹¹⁰ Barth 1969.

¹¹¹ Garay 2016; Hunter and Brill 2016.

As scholarly interest in identity politics has continued to grow in recent years, scholars have called for greater attention to not only the political consequences of identities, but also to the ways in which identities come into formation in the first place.¹¹² This study has served to fill theoretical and empirical gaps, but it has also drawn attention to the ways stigma and social hierarchies shape the politicization of identities and inequalities. For decades scholars have bemoaned how the targets of racialized discrimination themselves participate in the reproduction of racial hierarchies in Brazil.¹¹³ This study highlights how citizenship institutions can encourage and empower individuals to confront and challenges social hierarchies, rather than comply with them. That such a reversal in the status quo could unfold so suddenly in this famously puzzling case is a testament to both the poverty of social citizenship in decades past, as well as to the remarkable progress made more recently. Also noteworthy, however, is the general lack of consideration paid to factors like stigma and social hierarchies in comparative theorizing on identity politicization. Such factors ought to be considered in future studies aiming to understanding why certain identities do or do not become politicized, as well as what role, if any, the institutions and experiences of citizenship play in preventing/encouraging the politicization of stigmatized identities, social categories, and inequalities. To be sure, the social policy expansion and state-led efforts to better incorporate marginal citizens is far from unique to the Brazilian case, and has become an object of fascination for scholars of Latin American politics in particular. But as societies across the developing world aim to fulfill the promises of democracy and citizenship, social stigma, hierarchies, and citizenship are likely to serve as fruitful points of departure in scholarly efforts to understand the politicization of identities and inequalities.

¹¹² Brubaker and Cooper 2000; Smith 2004; Lee 2008.

¹¹³ Hanchard 1994; Marx 1998; Twine 1998; Hordge-Freeman 2015.

Appendix

	(1)		(2)		(3)		(4)	
	Full Sample		Excl. Top Decile		Bottom 5 Deciles		Top Decile	
1998 x Primary	-0.033	(0.061)	-0.043	(0.062)	-0.090	(0.073)	0.634	(0.591)
1998 x High School	-0.106	(0.082)	-0.108	(0.085)	0.098	(0.133)	0.385	(0.578)
1998 x University	-0.094	(0.137)	0.117	(0.196)	0.205	(0.599)	0.279	(0.586)
2003 x Primary	0.028	(0.060)	0.020	(0.060)	0.044	(0.072)	0.242	(0.561)
2003 x High School	0.172	(0.078)*	0.146	(0.080) ⁺	0.298	(0.125)*	0.523	(0.545)
2003 x University	0.198	(0.129)	0.282	(0.184)	0.836	(0.529)	0.458	(0.551)
2008 x Primary	0.077	(0.061)	0.066	(0.061)	0.087	(0.074)	0.642	(0.522)
2008 x High School	0.252	(0.076)*	0.201	(0.079)*	0.423	(0.121)*	0.857	(0.507) ⁺
2008 x University	0.424	(0.122)*	0.570	(0.172)*	1.075	(0.467)*	0.669	(0.513)
2013 x Primary	0.048	(0.064)	0.029	(0.064)	0.074	(0.080)	0.630	(0.492)
2013 x High School	0.271	(0.078)*	0.244	(0.081)*	0.475	(0.125)*	0.631	(0.478)
2013 x University	0.422	(0.123)*	0.554	(0.173)*	1.108	(0.467)*	0.552	(0.484)
2015 x Primary	0.110	(0.064) ⁺	0.086	(0.065)	0.028	(0.081)	1.197	(0.497)*
2015 x High School	0.301	(0.078)*	0.256	(0.081)*	0.495	(0.125)*	1.320	(0.483)*
2015 x University	0.527	(0.122)*	0.573	(0.171)*	0.963	(0.465)*	1.333	(0.488)*
1998	-0.918	(0.878)	-0.453	(0.917)	-0.082	(1.247)	-6.511	(3.143)*
2003	-0.279	(1.043)	-0.862	(1.092)	-0.034	(1.495)	4.307	(3.609)
2008	-1.812	(1.167)	-1.624	(1.234)	-2.021	(1.755)	-2.613	(3.730)
2013	-0.057	(1.002)	0.202	(1.065)	1.327	(1.566)	-0.911	(3.104)
2015	-1.152	(0.923)	-0.665	(0.987)	0.245	(1.453)	-4.281	(2.822)
Primary	-0.321	(0.046)*	-0.325	(0.046)*	-0.306	(0.055)*	-0.928	(0.409)*
High School	-0.777	(0.061)*	-0.750	(0.064)*	-0.887	(0.102)*	-1.318	(0.401)*
University	-1.460	(0.107)*	-1.387	(0.157)*	-1.591	(0.447)*	-1.827	(0.407)*
Interactive Controls	Y		Y		Y		Y	
Interactive State FX	Y		Y		Y		Y	
Observations	137,410		120,468		61,464		16,942	
AIC	156984.253		139551.998		70295.603		17285.052	

Table A1 Longitudinal Relationship between Education and Nonwhite Identification.

⁺ $p < .1$, * $p < .05$.

Robust standard errors in parentheses. Interaction terms estimated relative to the 1993 baseline year and the “less than primary” education category.

References

- Andrews, George Reid. 2004. *Afro-Latin America, 1800-2000*. New York: Oxford University Press.
- Artes, Amélia, and Arlene Martinez Ricoldi. 2015. "Acesso de negros no ensino superior: o que mudou entre 2000 e 2010." *Cadernos de Pesquisa* 45, no. 158: 858–81.
- Bailey, Stanley R. 2008. "Unmixing for Race Making in Brazil." *American Journal of Sociology* 114, no. 3: 577–614.
- Bailey, Stanley R. 2009. *Legacies of Race: Identities, Attitudes, and Politics in Brazil*. Stanford: Stanford University Press.
- Bailey, Stanley R., and Edward E. Telles. 2006. "Multiracial versus Collective Black Categories: Examining Census Classification Debates in Brazil." *Ethnicities* 6, no. 1: 74–101.
- Barth, Fredrik. 1969. *Ethnic Groups and Boundaries: The Social Organization of Culture Difference*. Long Grove: Waveland Press.
- Blair, Graeme, and Kosuke Imai. 2012. "Statistical Analysis of List Experiments." *Political Analysis* 20, no. 1: 47–77.
- Brubaker, Rogers, and Frederick Cooper. 2000. "Beyond 'Identity.'" *Theory and Society* 29: 1–47.
- Bueno, Natália S., and Thad Dunning. 2017. "Race, Resources, and Representation: Evidence from Brazilian Politicians." *World Politics* 69, no. 2: 327–65.
- Burdick, John. 1998. "The Lost Constituency of Brazil's Black Movements." *Latin American Perspectives* 25, no. 1: 136–55.
- Caldwell, Kia. 2007. *Negras in Brazil: Re-Envisioning Black Women, Citizenship, and the Politics of Identity*. New Brunswick: Rutgers University Press.
- Campante, Filipe R., Anna R. V. Crespo, and Phillippe G. P. G. Leite. 2004. "Desigualdade salarial entre raças no mercado de trabalho urbano brasileiro: aspectos regionais." *Revista Brasileira de Economia* 58, no. 2.
- Carvalho, José Alberto Magno de, Charles H. Wood, and Flávia Cristina Drumond Andrade. 2004. "Estimating the Stability of Census-Based Racial/Ethnic Classifications: The Case of Brazil." *Population Studies* 58, no. 3: 331–43.
- Chandra, Kanchan. 2004. *Why Ethnic Parties Succeed*. New York: Cambridge University Press.
- Chandra, Kanchan. 2005. "Ethnic Parties and Democratic Stability." *Perspectives on Politics* 3, no. 2: 235–252.

- Chandra, Kanchan. 2012. "How Ethnic Identities Change." In Kanchan Chandra, ed. *Constructivist Theories of Ethnic Politics* New York: Oxford University Press.
- Cornwell, Christopher, Jason Rivera, and Ian M. Schmutte. 2014. "Wage Discrimination When Identity Is Subjective: Evidence from Changes in Employer-Reported Race."
- Cramer, Katherine J. 2016. *The Politics of Resentment: Rural Consciousness in Wisconsin and the Rise of Scott Walker*. Chicago: University of Chicago Press.
- Dawson, Michael C. 1995. *Behind the Mule: Race and Class in African-American Politics*. Princeton: Princeton University Press.
- Deaton, Angus. 1985. "Panel Data from Time Series of Cross-Sections." *Journal of Econometrics* 30, no. 1–2: 109–126.
- Degler, Carl N. 1971. *Neither Black Nor White: Slavery and Race Relations in Brazil and the United States*. Madison: University of Wisconsin Press.
- De Micheli, David. 2018. "What Is Political Identity? Concept Clarification with Insight from Brazil." Paper presented at the 76th Annual Conference of the Midwest Political Science Association, Chicago, IL.
- Francis, Andrew M., and Maria Tannuri-Pianto. 2012. "Using Brazil's Racial Continuum to Examine the Short-Term Effects of Affirmative Action in Higher Education." *Journal of Human Resources* 47, no. 3: 754–84.
- Francis, Andrew M., and Maria Tannuri-Pianto. 2013. "Endogenous Race in Brazil: Affirmative Action and the Construction of Racial Identity among Young Adults." *Economic Development and Cultural Change* 61, no. 4: 731–53.
- Francis-Tan, Andrew, and Maria Tannuri-Pianto. 2015. "Inside the Black Box: Affirmative Action and the Social Construction of Race in Brazil." *Ethnic and Racial Studies* 38, no. 15: 2771–90.
- Garay, Candelaria. 2016. *Social Policy Expansion in Latin America*. New York: Cambridge University Press.
- Globo. 2017. "Unesp vai adotar comissão para evitar fraudes em cotas raciais." July 10. At <https://oglobo.globo.com/sociedade/unesp-vai-adotar-comissao-para-evitar-fraudes-em-cotas-raciais-21572736>, accessed June 2, 2018.
- Gomes, Alfredo Macedo, and Karine Numes de Moraes. 2012. "Educação superior no Brasil contemporâneo: transição para um sistema de massa." *Educação & Sociedade* 33, no. 118: 171–90.
- Guillerm, Marine. 2017. "Les méthodes de pseudo-panel et un exemple d'application aux données du patrimoine." *Economie et Statistique / Economics and Statistics* no. 491–492: 119–40.

- Hagopian, Frances. 1996. *Traditional Politics and Regime Change in Brazil*. New York: Cambridge University Press.
- Hanchard, Michael George. 1994. *Orpheus and Power: The Movimento Negro of Rio de Janeiro and São Paulo, Brazil, 1945-1988*. Princeton: Princeton University Press.
- Harris, Marvin. 1952. "Race Relations in Minas Velhas, a Community in the Mountain Region of Central Brazil." In Charles Wagley, ed. *Race and Class in Rural Brazil* Paris: UNESCO.
- Hasenbalg, Carlos A. 1979. *Discriminação e desigualdades raciais no Brasil*. Rio de Janeiro: Graal.
- Heringer, Rosana. 2015. "Affirmative Action and the Expansion of Higher Education in Brazil." In Ollie A. Johnson III and Rosana Heringer, eds. *Race, Politics, and Education in Brazil: Affirmative Action in Higher Education* New York: Palgrave Macmillan.
- Hirschman, Albert O. 1970. *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*. Cambridge: Harvard University Press.
- Hochschild, Jennifer L. 1995. *Facing up to the American Dream: Race, Class, and the Soul of the Nation*. Princeton: Princeton University Press.
- Hordge-Freeman, Elizabeth. 2015. *The Color of Love: Racial Features, Stigma, and Socialization in Black Brazilian Families*. Austin: University of Texas Press.
- Htun, Mala. 2004. "From 'Racial Democracy' to Affirmative Action: Changing State Policy on Race in Brazil." *Latin American Research Review* 39, no. 1: 60–89.
- Huber, John D. 2017. *Exclusion by Elections: Inequality, Ethnic Identity, and Democracy*. New York: Cambridge University Press.
- Huddy, Leonie. 2013. "From Group Identity to Political Cohesion and Commitment." In Leonie Huddy, David O. Sears, and Jack S. Levy, eds. *The Oxford Handbook of Political Psychology*, 2nd ed. New York: Oxford University Press.
- Hunter, Wendy, and Robert Brill. 2016. "'Documents, Please': Advances in Social Protection and Birth Certification in the Developing World." *World Politics* 68, no. 2: 191–228.
- INEP. 2016. "Resumo Técnico: Resultados do Índice de Desenvolvimento da Educação Básica, 2005-2015." Brasília: Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira, Ministério da Educação.
- Kruks-Wisner, Gabrielle. 2018. *Claiming the State: Active Citizenship and Social Welfare in Rural India*. New York: Cambridge University Press.
- Laitin, David D. 1986. *Hegemony and Culture: Politics and Religious Change among the Yoruba*. Chicago: University of Chicago Press.

- Laitin, David D. 1998. *Identity in Formation: The Russian-Speaking Populations in the Near Abroad*. Ithaca: Cornell University Press.
- Lee, Taeku. 2008. "Race, Immigration, and the Identity-to-Politics Link." *Annual Review of Political Science* 11, no. 1: 457–78.
- Lieberman, Evan S. 2003. *Race and Regionalism in Taxation Policy in Brazil and South Africa*. New York: Cambridge University Press.
- Lieberman, Evan S. 2009. *Boundaries of Contagion: How Ethnic Politics Have Shaped Government Responses to AIDS*. Princeton: Princeton University Press.
- Lima, Márcia. 2010. "Desigualdades raciais e políticas públicas: ações afirmativas no governo Lula." *Novos estudos CEBRAP* no. 87: 77–95.
- Lovell, Peggy A. 1999. "Development and the Persistence of Racial Inequality in Brazil: 1950–1991." *The Journal of Developing Areas*: 395–418.
- Lovell, Peggy A., and Charles H. Wood. 1998. "Skin Color, Racial Identity, and Life Chances in Brazil." *Latin American Perspectives* 25, no. 3: 90–109.
- Loveman, Mara. 2014. *National Colors: Racial Classification and the State in Latin America*. New York: Oxford University Press.
- Loveman, Mara, Jeronimo O. Muniz, and Stanley R. Bailey. 2012. "Brazil in Black and White? Race Categories, the Census, and the Study of Inequality." *Ethnic and Racial Studies* 35, no. 8: 1466–83.
- Mainwaring, Scott. 1999. *Rethinking Party Systems in the Third Wave of Democratization: The Case of Brazil*. Stanford: Stanford University Press.
- Marshall, T.H. 1950. *Citizenship and Social Class*. Cambridge: Cambridge University Press.
- Marteleteo, Leticia J. 2012. "Educational Inequality by Race in Brazil, 1982–2007: Structural Changes and Shifts in Racial Classification." *Demography* 49, no. 1: 337–58.
- Martins, Leonardo. 2018. "Unesp expulsa 27 estudantes por fraude no sistema de cotas." *UOL*, December 13. At https://educacao.uol.com.br/noticias/2018/12/13/unesp-expulsa-27-estudantes-por-fraude-no-sistema-de-cotas.htm?fbclid=IwAR1j8a9KLms2t_M6qrN5WLkqA-cp0vru8oFU23I-3EHmA5yer8wmyZGMIHU, accessed December 14, 2018.
- Marx, Anthony W. 1998. *Making Race and Nation: A Comparison of South Africa, the United States, and Brazil*. New York: Cambridge University Press.
- McAdam, Doug. 1982. *Political Process and the Development of Black Insurgency, 1930–1970*. Chicago: University of Chicago Press.

- Melo, Marcus André. 2017. "Checking the Power of Mayors: Explaining Improvements in Brazilian Educational Outcomes." In Peter R. Kingstone and Timothy J. Power, eds. *Democratic Brazil Divided* Pittsburgh: University of Pittsburgh Press.
- Miranda, Vitor. 2015. "A Resurgence of Black Identity in Brazil? Evidence from an Analysis of Recent Censuses." *Demographic Research* 32, no. 59: 1603–30.
- Mische, Ann. 2008. *Partisan Publics: Communication and Contention across Brazilian Youth Activist Networks*. Princeton: Princeton University Press.
- Mitchell, Gladys. 2009. "Campaign Strategies of Afro-Brazilian Politicians: A Preliminary Analysis." *Latin American Politics and Society* 51, no. 3: 111–142.
- Mitchell-Walthour, Gladys. 2018. *The Politics of Blackness: Racial Identity and Political Behavior in Contemporary Brazil*. New York: Cambridge University Press.
- Moffitt, Robert. 1993. "Identification and Estimation of Dynamic Models with a Time Series of Repeated Cross-Sections." *Journal of Econometrics* 59, no. 1–2: 99–123.
- Munson, Ziad W. 2010. *The Making of Pro-Life Activists: How Social Movement Mobilization Works*. Chicago: University of Chicago Press.
- Nagel, Joane. 1986. "The Political Construction of Ethnicity." In Susan Olzak and Joane Nagel, eds. *Competitive Ethnic Relations* Orlando: Academic Press.
- Neri, Marcelo Cortes. 2011. *A nova classe média: o lado brilhante da base da pirâmide*. São Paulo: Editora Saraiva.
- Nogueira, Oracy. 1998. *Preconceito de marca: as relações raciais em Itapetininga*. São Paulo: EdUSP.
- Oliveira, Cloves Luiz Pereira. 2007. "A inevitável visibilidade da cor." Ph.D. Diss., Rio de Janeiro: Instituto Universitario de Pesquisas do Rio de Janeiro.
- Oliveira, Tory. 2016. "Como evitar fraudes nas cotas raciais?" *CartaCapital*, June 16. At <https://www.cartacapital.com.br/sociedade/como-evitar-fraudes-nas-cotas-raciais>, accessed June 2, 2018.
- Paschel, Tianna S. 2016. *Becoming Black Political Subjects: Movements and Ethno-Racial Rights in Colombia and Brazil*. Princeton: Princeton University Press.
- Pepinsky, Thomas B. 2017. "Regions of Exception." *Perspectives on Politics* 15, no. 4: 1034–52.
- Perry, Keisha-Khan Y. 2013. *Black Women Against the Land Grab: The Fight for Racial Justice in Brazil*. Minneapolis: University of Minnesota Press.
- Posner, Daniel N. 2005. *Institutions and Ethnic Politics in Africa*. New York: Cambridge University Press.

- Rangel, Marcos A. 2015. "Is Parental Love Colorblind? Human Capital Accumulation within Mixed Families." *The Review of Black Political Economy* 42, no. 1–2: 57–86.
- Samuels, David. 2006. "Sources of Mass Partisanship in Brazil." *Latin American Politics and Society* 48, no. 2: 1–27.
- Schwartzman, Luisa Farah. 2007. "Does Money Whiten? Intergenerational Changes in Racial Classification in Brazil." *American Sociological Review* 72, no. 6: 940–963.
- Schwartzman, Luisa Farah. 2008. "Who Are the Blacks? The Question of Racial Classification in Brazilian Affirmative Action Policies in Higher Education." *Cahiers de La Recherche Sur l'Education et Les Savoirs* no. 7: 27–47.
- Schwartzman, Luisa Farah, and Angela Randolph Paiva. 2014. "Not Just Racial Quotas: Affirmative Action in Brazilian Higher Education 10 Years Later." *British Journal of Sociology of Education*: 1–19.
- Schwartzman, Luisa Farah, and Graziella Moraes Dias da Silva. 2012. "Unexpected Narratives from Multicultural Policies: Translations of Affirmative Action in Brazil." *Latin American and Caribbean Ethnic Studies* 7, no. 1: 31–48.
- Senkevics, Adriano Souza. 2017. "De brancos para negros? uma análise longitudinal da reclassificação racial no enem, 2010-2016." Manuscript.
- Sheriff, Robin E. 2001. *Dreaming Equality: Color, Race, and Racism in Urban Brazil*. New Brunswick: Rutgers University Press.
- Shingles, Richard D. 1981. "Black Consciousness and Political Participation: The Missing Link." *The American Political Science Review* 75, no. 1: 76–91.
- Silva, Graziella Moraes da, and Elisa P. Reis. 2011. "Perceptions of Racial Discrimination among Black Professionals in Rio de Janeiro." *Latin American Research Review* 46, no. 2: 55–78.
- Silva, Nelson do Valle. 1994. "Uma nota sobre 'raça social' no Brasil." *Estudos Afro-Asiáticos* 26: 67–80.
- Smith, Rogers M. 2004. "Identities, Interests, and the Future of Political Science." *Perspectives on Politics* 2, no. 2: 301–12.
- Snow, David A., E. Burke Rochford, Steven K. Worden, and Robert D. Benford. 1986. "Frame Alignment Processes, Micromobilization, and Movement Participation." *American Sociological Review* 51, no. 4: 464–81.
- Soares, Sergei. 2008. "A Demografia da cor: a composição da população brasileira de 1890 a 2007." In Luciana Jaccoud, Rafael Guerreiro Osorio, and Sergei Soares, eds. *As Políticas públicas e a desigualdade racial no Brasil 120 anos após a abolição* Brasília: Instituto da Pesquisa Economica Aplicada.

- Soares, Sergei Suarez Dillon. 2000. "O perfil da discriminação no mercado de trabalho: homens negros, mulheres brancas e mulheres negras." 769 Brasília: IPEA.
- Souza, Neusa Santos. 1983. *Tornar-se negro*. Rio de Janeiro: Graal.
- Sperb, Paula. 2017. "Defesa de acusados de fraudar cotas vê 'tribunal racial' na UFRGS." *Veja*, December 6. At <https://veja.abril.com.br/blog/rio-grande-do-sul/defesa-de-acusados-de-fraudar-cotas-ve-tribunal-racial-na-ufrgs/>, accessed June 2, 2018.
- Tajfel, Henri. 1974. "Social Identity and Intergroup Behaviour." *Social Science Information* 13, no. 2: 65–93.
- Tate, Katherine. 1994. *From Protest to Politics: The New Black Voters in American Elections*. Cambridge: Harvard University Press.
- Telles, Edward E. 2004. *Race in Another America: The Significance of Skin Color in Brazil*. Princeton: Princeton University Press.
- Telles, Edward E. 2014. *Pigmentocracies: Ethnicity, Race, and Color in Latin America*. Chapel Hill: University of North Carolina Press.
- Telles, Edward E., and Nelson Lim. 1998. "Does It Matter Who Answers the Race Question? Racial Classification and Income Inequality in Brazil." *Demography* 35, no. 4: 465–474.
- Telles, Edward E., and Tianna Paschel. 2014. "Who Is Black, White, or Mixed Race? How Skin Color, Status, and Nation Shape Racial Classification in Latin America." *American Journal of Sociology* 120, no. 3: 864–907.
- Twine, France Winddance. 1998. *Racism in a Racial Democracy: The Maintenance of White Supremacy in Brazil*. New Brunswick: Rutgers University Press.
- Verbeek, Marno. 2008. "Pseudo-Panels and Repeated Cross-Sections." In László Mátyás and Patrick Sevestre, eds. *The Econometrics of Panel Data: Fundamentals and Recent Developments in Theory and Practice*, 3rd ed. Berlin: Springer-Verlag.
- Wagley, Charles. 1965. "On the Concept of Social Race in the Americas." In Dwight B. Heath, ed. *Contemporary Cultures and Societies of Latin America*. New York: Random House.
- Wood, Charles H., and José Alberto Magno de Carvalho. 1994. "Categorias do censo e classificação subjetiva de cor no Brasil." *Revista Brasileira de Estudos de População* 11, no. 1: 3–17.
- World Bank. 2002. "Brazil Municipal Education: Resources, Incentives, and Results." Policy Report 24413-BR World Bank.
- Yashar, Deborah J. 2005. *Contesting Citizenship in Latin America: The Rise of Indigenous Movements and the Postliberal Challenge*. New York: Cambridge University Press.

Racial Reclassification and Political Identity Formation

Supplementary Appendix – Abridged

David De Micheli

Contents

- A. Census Classification Schemes and Demographic Statistics
- B. Interview Sampling and Methods Sequencing
- C. Longitudinal Analysis: Testing the Political Identity Hypothesis
- D. Survey Experiments: Testing the Instrumental Hypothesis

APPENDIX A
CENSUS CLASSIFICATION SCHEMES AND DEMOGRAPHIC STATISTICS

Year	White/ Branca	Black/ Preta	Brown/ Parda	Yellow/ Amarela	Indigenous/ Indígena	Mixed/ Mestiça	Cabocla
1872	Y	Y	Y	N	N	N	Y
1890	Y	Y	N	N	N	Y	Y
1900	-	-	-	-	-	-	-
1920	-	-	-	-	-	-	-
1940	Y	Y	N*	Y	N	N	N
1950	Y	Y	Y	Y	N	N	N
1960	Y	Y	Y	Y	N	N	N
1970	-	-	-	-	-	-	-
1980	Y	Y	Y	Y	N	N	N
1991	Y	Y	Y	Y	Y	N	N
2000	Y	Y	Y	Y	Y	N	N
2010	Y	Y	Y	Y	Y**	N	N

Table A1 Census Classification Schemes, 1872-2010. Source: Características étnico-raciais da população: um estudo das categorias de classificação de cor ou raça : 2008 / IBGE, Coordenação de População e Indicadores Sociais (IBGE 2011). *Responses of “other” re-coded as “pardo”.

**Census includes indigenous subgroup and language spoken in addition to this color category.

Census	Nationality	Population	Percentage
1991	Native Brazilians	146,048,028	99.48
	Naturalized		
	Brazilians	161,151	0.11
	Foreign Resident	606,624	0.41
	Total	146,815,803	100
2000	Native Brazilians	169,189,026	99.60
	Naturalized		
	Brazilians	173,763	0.10
	Foreign Resident	510,067	0.30
	Total	169,872,856	100
2010	Native Brazilians	190,163,229	99.69
	Naturalized		
	Brazilians	161,250	0.08
	Foreign Resident	431,319	0.23
	Total	190,755,799	100

Table A2 International Immigration to Brazil, 1991-2010. Source: Census, IBGE

Age	2000					2010				
	Total	White	Black	Brown	Ratio	Total	White	Black	Brown	Ratio
0 - 4	4.85	3.63	3.10	3.26	0.89	3.40	2.89	1.93	3.26	1.08
5 - 9	0.32	0.27	0.32	0.26	0.98	0.28	0.25	0.22	0.26	1.02
10 - 14	0.36	0.31	0.35	0.29	0.96	0.33	0.29	0.31	0.33	1.11
15 - 19	1.07	0.87	1.32	1.02	1.21	1.12	0.85	1.11	1.24	1.44
20 - 29	1.74	1.38	2.14	1.66	1.25	1.65	1.24	1.60	1.91	1.50
30 - 39	2.44	1.96	3.30	2.15	1.19	2.09	1.68	2.38	2.25	1.35
40 - 49	4.45	3.75	5.82	3.59	1.06	3.76	3.29	4.36	3.74	1.17
50 - 59	8.82	7.90	9.93	6.40	0.89	7.69	7.30	8.76	6.94	1.00
60 - 69	18.76	17.67	18.93	12.43	0.77	15.89	15.80	16.54	13.69	0.90

Table A3 Mortality Rates in 2000 and 2010, by Race and Age. Measured as deaths per 1,000. Source: Ministério de Saude, DataSUS. The ratio is computed as mortalities of *negros* (blacks and browns) relative to whites.

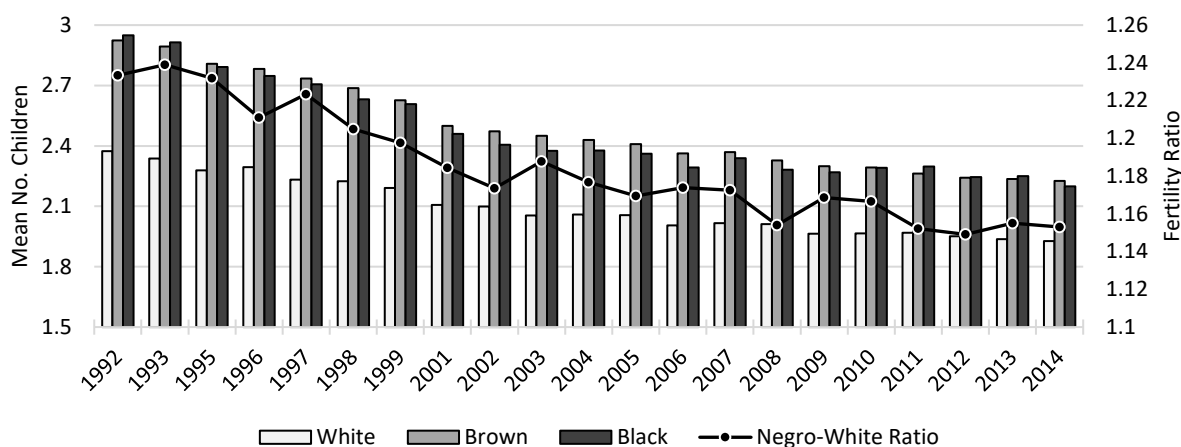


Figure A1 Fertility Rates of Women Aged 15-44, 1992-2014. Source: PNAD, IBGE.

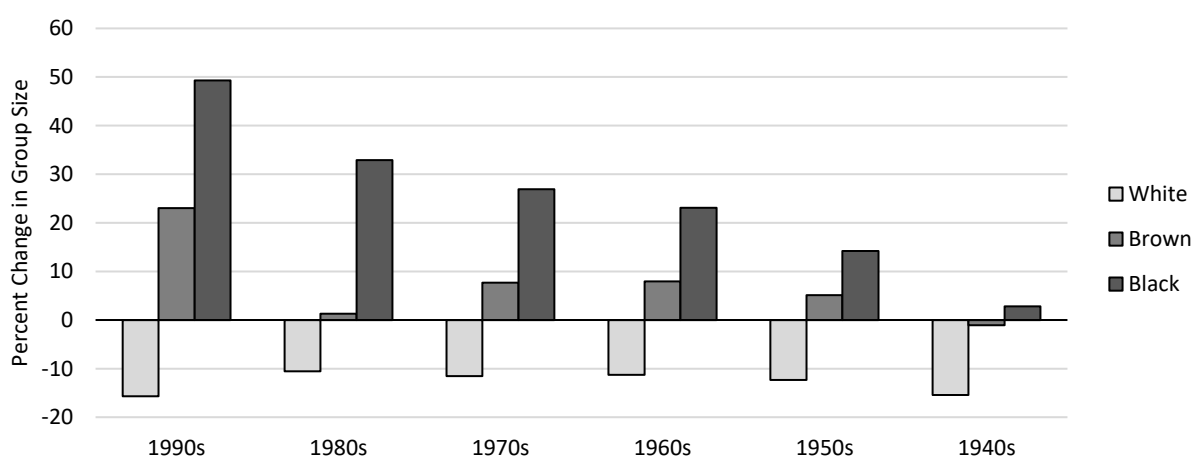


Figure A2 Change in Size of Racial Groups between 2000 and 2010 and within Birth Cohorts. Bar clusters indicate cohort based on decade of birthyear. Source: IBGE.

APPENDIX B

INTERVIEW METHODS AND METHODS SEQUENCING

Methods Sequencing and Generating the Political Identity Hypothesis

The data and analyses presented in this article reflect a multi-stage research design in which initial hypotheses derived from the literature were preliminarily tested using both observational qualitative methods (participant observation and interviews) and systematic quantitative methods (regression analysis of municipal-level census data). With little support found for these hypotheses, I embarked on hypothesis-generating qualitative field research. The main goal of this fieldwork was to identify reclassifiers who were willing to participate in relatively open-ended interviews, with the intention of allowing these discussions to generate new hypotheses and insights, and to allow individuals to provide their own reflections on the processes of reclassification and consciousness formation. After preliminary field trips to establish institutional affiliations and secure grant funding, I began field research in São Paulo in July 2016. According to apparent subnational variation in patterns of reclassification, São Paulo was a strong positive case, and would likely serve as a useful starting point for identifying and exploring the phenomenon of interest. In Seawright and Gerring's (2008) terms, São Paulo is an "extreme value on Y."

In São Paulo, I began by embedding myself in sites where I thought I would be most likely to find reclassifiers: black movement spaces and events; local NGOs and other civil society organizations; political campaigns and events of local politicians campaigning on "the racial question; and university associations. My goal was to collect data through participant observation, aiming to understand the discourse and rhetoric employed toward race, and to meet individuals who might reveal themselves to be reclassifiers and who, through personal contact with me, might agree to be interviewed about this process. After identifying initial interviewees, I allowed additional interview subjects to "snowball" and continued to interview subjects until I felt I had reached saturation (Morse 2000).

Regarding the specific goals of the qualitative research, I used participant observation and open-ended, in-depth interviews with reclassifiers and non-reclassifiers to inductively generate new ideas and hypotheses about the causes of these apparent patterns of reclassification (Lynch 2013). These data were invaluable for illustrating causal pathways and giving me a sense of what these processes looked like "on the ground." Before beginning this fieldwork, I hypothesized that racial consciousness was an important part of the observed patterns, but my initial hypothesis that racial and class cleavage structures were the cause of such consciousness proved to hold little water. As a result, the overly structural hypothesis fell away, but it remained clear to me that consciousness was an important part of this story.

It was in São Paulo, my first prolonged research site, where the centrality of education as a driving force in these patterns had come to the fore. Yet while this crystallized for me in São Paulo after completing a number of illuminating interviews, this was not something that came through explicitly or brightly in every single conversation. In fact, if ever I asked reclassifiers in my interviews what factor they would point to as the determinants of their racial identity change, almost none mentioned "education" by name. Instead, they often pointed to their personal experiences that were direct or indirect consequences of acquiring greater education (what they learned about history, how they got involved in a particular social movement or association, or what they experienced at their job). An important part of the generation of this hypothesis was allowing the diversity of personal experiences of my interview subjects to accumulate before it could become clear to me how exactly education could operate in ways that would alter their understandings of racial boundaries and shape their political consciousness.

Having narrowed in on education as the hypothesized driving force of these patterns, I moved to Recife, the capital city of the northeastern state of Pernambuco, in February 2017 to continue exploring these ideas in an ostensibly “weak” site for reclassification. There, I pursued similar sites for recruiting interview subjects and also employed snowball sampling. To gain greater leverage on the effects of greater education, I also sought to include lower-educated individuals in my interview sample, since these subjects were entirely absent among my São Paulo interviewees. To get access to and build relationships with less-educated Brazilians, I specifically set out to observe courses on adult literacy with local organizations (which in many ways were similar educational sites to those where I made contact with other interview subjects).

Once I felt I had a firmer grasp of the argument from my qualitative research, I then sought to further specify and refine the hypothesis and mechanisms through inductive iteration (Yom 2015), moving repeatedly between the data I was collecting on the ground, specific empirical findings in the literature, and testing my hunches using systematic quantitative data. After finding that the political identity hypothesis held some water, I continued to develop this argument and sought to test it more rigorously, to a greater extent, and up against the alternative hypotheses presented in Chapters 2 and 5. Overall, I employed a multi-method and multi-staged research design in this project which enabled me to mine for insights into causal processes and later test these insights systematically.

	Variable	Mean	St. Dev.	Min.	Max.	N
	Recife	0.47	0.51	0	1	34
	Age	31.62	14.01	18	70	34
	Female	0.59	0.50	0	1	34
	Per capita household income	1307	1419.72	0	7666.67	34
	Household residents	3.32	1.53	1	7	34
	Residents with income	1.65	0.95	0	4	34
	Household Income	3637.26	4001.69	0	23000	34
	Reclassifier	0.56	0.50	0	1	34
Education		3.15	1.02	1	4	34
	(1) < Primary	0.15	0.36	0	1	34
	(3) High School	0.41	0.50	0	1	34
	(4) University	0.44	0.50	0	1	34
Racial ID		2.58	0.61	1	3	33
	(1) White	0.06	0.24	0	1	33
	(2) Brown	0.30	0.47	0	1	33
	(3) Black	0.64	0.49	0	1	33

Table B1 Descriptive Statistics of Interview Sample. Means for education, racial ID, and the political identity index reflect the means of single categorical or composite measures of individual values or items. Numbers in parentheses reflect codings of these single variables. Responses to question 12 were measured on a 5-category Likert scale, discretized such that responses of uncomfortable or very uncomfortable were coded as 1. The political identity index is the mean of questions 10 through 16 of the structured interview questionnaire.

APPENDIX C

LONGITUDINAL ANALYSIS: TESTING THE POLITICAL IDENTITY HYPOTHESIS

Table C1 shows the cohorts under examination in this analysis. Pseudo-panel analysis naturally requires the analysis to specify the size and number of cohorts in an analysis, inducing a bias-variance tradeoff. Verbeek and Nijman (1992), however, show that the effect of ignoring bias will be small so long as there is sufficient variation in cohort means over time. These authors recommend a minimum cohort size of 100 observations in any given year, but suggest a minimum of 200 observations. It is clear from Table C1 that cohorts 7 and 8 suffer from small sample sizes in some survey years (because the sample is restricted to heads of household), and are thus not suitable for analysis.

PNAD Sampling and Data Collection

PNAD surveys are similar to the American Community Survey in the United States and are considered analogous to the census in years when the census is not conducted. The purpose of the survey is primarily demographic and economic in nature, and the survey is conducted by the Brazilian census bureau, *o Instituto Brasileiro de Geografia e Estatística*, or IBGE. PNAD interviews are conducted in-person. With regard to racial classification, the IBGE has maintained a policy of relying of respondents' self-declaration as a measure of "race" (IBGE 2003, 2016). PNAD questionnaires are applied via in-person interviews. Since 2007, interviews have involved the use of digital technology to record survey responses.

PNAD samples are multi-stage probability samples. As these are demographic and economic surveys, the target population of PNAD is the national population of Brazil. The primary sampling unit is the municipality (*município*), analogous to a U.S. county. The secondary sampling unit is the census tract (*setor censitário*) and the final sampled unit is the household. Large municipalities (those containing metropolitan areas) are always included in the sample. Remaining municipalities are stratified by population, with each sampled with equal probability. In the second stage census tracts are similarly stratified and sample with equal probability. Additional methodological information on PNAD/IBGE sampling is available on the website of the Brazilian census bureau (e.g., Pesquisa Nacional n.d.).

After each census, municipalities and census tracts randomly sampled are maintained in PNAD samples until the next census is conducted. The sampling frame for each survey consists of a list of households in sampled census tracts. The number of households sampled per census tract was initially set at 16. More recently, the sampling fraction has varies from 1/50 in Roraima, a largely rural state, to 1/800 in São Paulo, Brazil's most populous and a very urbanized state.

Cohort	Birthyear		Age		Observations	
	Min	Max	1992	2015	Min	Max
1	1950	1954	37-42	60-65	8,877	11,403
2	1955	1959	32-37	55-60	10,252	12,674
3	1960	1964	27-32	50-55	9,962	14,496
4	1965	1969	22-27	45-50	6,722	14,135
5	1970	1974	17-22	40-45	2,058	13,472
6	1975	1979	12-17	35-40	104	12,610
7	1980	1984	-	30-35	6	11,509
8	1985	1989	-	25-30	4	8,349

Table C1 Birth Cohorts in PNAD Sample

Year	Cohort					
	1	2	3	4	5	6
1992	1.97	2.06	2.07	1.97	1.81	1.60
1993	1.99	2.07	2.09	2.01	1.89	1.70
1995	2.01	2.07	2.07	2.04	1.92	1.78
1996	2.01	2.08	2.11	2.07	1.97	1.82
1997	2.03	2.11	2.11	2.08	2.01	1.86
1998	2.04	2.11	2.12	2.10	2.06	1.95
1999	2.03	2.11	2.14	2.12	2.08	2.01
2001	2.02	2.11	2.14	2.13	2.12	2.04
2002	2.06	2.13	2.18	2.18	2.17	2.14
2003	2.05	2.13	2.17	2.18	2.19	2.19
2004	2.05	2.13	2.18	2.20	2.21	2.22
2005	2.05	2.14	2.19	2.22	2.23	2.27
2006	2.06	2.16	2.22	2.24	2.27	2.31
2007	2.06	2.17	2.22	2.25	2.29	2.35
2008	2.06	2.18	2.26	2.31	2.32	2.38
2009	2.08	2.18	2.26	2.36	2.32	2.40
2011	2.05	2.16	2.26	2.36	2.33	2.44
2012	2.07	2.20	2.30	2.39	2.38	2.49
2013	2.07	2.19	2.30	2.41	2.42	2.51
2014	2.06	2.21	2.29	2.40	2.42	2.52
2015	2.07	2.22	2.31	2.42	2.47	2.53

Table C2 Cohort Education Means in Each Survey Year, 1992-2015. In this analysis, education is coded categorically to capture four major levels of educational attainment: 1) less than primary education, 2) primary education, 3) high school, and 4) university.

Year	< Primary	Primary	High School	University
1992	0.65	0.46	0.32	0.14
1993	0.66	0.46	0.35	0.17
1995	0.65	0.46	0.36	0.17
1996	0.64	0.46	0.34	0.19
1997	0.66	0.46	0.35	0.19
1998	0.66	0.47	0.35	0.18
1999	0.67	0.47	0.36	0.19
2001	0.67	0.49	0.39	0.21
2002	0.67	0.50	0.40	0.22
2003	0.69	0.52	0.42	0.24
2004	0.68	0.52	0.43	0.26
2005	0.71	0.54	0.45	0.26
2006	0.71	0.54	0.45	0.28
2007	0.71	0.56	0.47	0.28
2008	0.71	0.57	0.48	0.31
2009	0.71	0.56	0.48	0.32
2011	0.70	0.56	0.50	0.35
2012	0.73	0.58	0.50	0.35
2013	0.72	0.57	0.50	0.34
2014	0.74	0.58	0.51	0.38
2015	0.73	0.60	0.52	0.38

Table C3 Mean Nonwhite ID by Education and Year (Cohorts 3 and 4)

Variable	Obs.	Mean	Std. Dev.	Min	Max
Year	141770	2005.658	7.449	1993	2015
Education	141756	2.234	0.901	1	4
Income	138423	5.859	2.892	1	10
Female	141770	0.275	0.447	0	1
Local Native	141769	0.435	0.496	0	1
State Migrant	141770	0.085	0.279	0	1
Cohort Lag	141770	0.519	0.041	0.456	0.577
State	141770	32.766	10.583	11	53

Table C4 Summary Statistics of Independent Variables (Cohorts 3 and 4)

Variable	Obs.	Mean	Std. Dev.	Min	Max
Year	328122	2005.658	7.449	1993	2015
Education	328083	2.234	0.901	1	4
Income	319536	5.859	2.892	1	10
Female	328122	0.275	0.447	0	1
Local Native	328120	0.435	0.496	0	1
State Migrant	328122	0.085	0.279	0	1
Cohort Lag	328122	0.519	0.041	0.456	0.577
State	328122	32.766	10.583	11	53

Table C5 Summary Statistics of Independent Variables (Cohorts 1-6)

(1)		
1998 x Primary	-0.033	(0.061)
1998 x High School	-0.106	(0.082)
1998 x University	-0.094	(0.137)
2003 x Primary	0.028	(0.060)
2003 x High School	0.172	(0.078)*
2003 x University	0.198	(0.129)
2008 x Primary	0.077	(0.061)
2008 x High School	0.252	(0.076)*
2008 x University	0.424	(0.122)*
2013 x Primary	0.048	(0.064)
2013 x High School	0.271	(0.078)*
2013 x University	0.422	(0.123)*
2015 x Primary	0.110	(0.064)+
2015 x High School	0.301	(0.078)*
2015 x University	0.527	(0.122)*
1998 x Income	0.017	(0.010)+
2003 x Income	0.014	(0.010)
2008 x Income	0.008	(0.010)
2013 x Income	0.013	(0.010)
2015 x Income	0.017	(0.010)+
1998 x Female	0.122	(0.071)+
2003 x Female	0.064	(0.066)
2008 x Female	0.080	(0.064)
2013 x Female	0.023	(0.065)
2015 x Female	0.029	(0.064)

1998 x Municip. Native	0.067	(0.049)
2003 x Municip. Native	0.040	(0.047)
2008 x Municip. Native	-0.058	(0.047)
2013 x Municip. Native	0.029	(0.048)
2015 x Municip. Native	0.014	(0.048)
1998 x State migrant	0.008	(0.071)
2003 x State migrant	0.006	(0.070)
2008 x State migrant	-0.129	(0.076) ⁺
2013 x State migrant	0.021	(0.087)
2015 x State migrant	-0.083	(0.093)
1998 x Cohort Lag	1.361	(1.813)
2003 x Cohort Lag	0.730	(2.111)
2008 x Cohort Lag	3.347	(2.194)
2013 x Cohort Lag	0.247	(1.865)
2015 x Cohort Lag	2.196	(1.717)
1998	-0.918	(0.878)
2003	-0.279	(1.043)
2008	-1.812	(1.167)
2013	-0.057	(1.002)
2015	-1.152	(0.923)
Primary	-0.321	(0.046)*
High School	-0.777	(0.061)*
University	-1.460	(0.107)*
Income	-0.104	(0.007)*
Female	0.026	(0.056)
Municip. native	-0.091	(0.037)*
State migrant	-0.035	(0.051)
Cohort Lag	0.806	(1.141)
Constant	1.003	(0.557) ⁺
Interactive State FX	Y	
Observations	137410	
AIC	156984.253	

Table C6 Pseudo-Panel Estimates of Nonwhite Identification among Cohorts 3 and 4.
Robust standard errors in parentheses. ⁺ $p < .1$, * $p < .05$.

	1993	1998	2003	2008	2013	2015
< Primary	0.566 (0.0136)	0.592 (0.0155)	0.587 (0.0116)	0.586 (0.0114)	0.628 (0.0132)	0.617 (0.0139)
Primary	0.504 (0.0120)	0.523 (0.0149)	0.529 (0.0103)	0.538 (0.0104)	0.574 (0.0128)	0.575 (0.0132)
High School	0.414 (0.0140)	0.417 (0.0160)	0.466 (0.0114)	0.480 (0.0110)	0.526 (0.0139)	0.522 (0.0142)
University	0.287 (0.0196)	0.291 (0.0184)	0.336 (0.0146)	0.377 (0.0126)	0.415 (0.0157)	0.428 (0.0155)

Table C7 Predicted Probabilities of Nonwhite ID. Computed from Model 4.

	1998	2003	2008	2013	2015
< Primary	0.0257 (0.0207)	0.0206 (0.0179)	0.0202 (0.0177)	0.0613* (0.0190)	0.0505* (0.0195)
Primary	0.0191 (0.0191)	0.0252 (0.0158)	0.0340* (0.0159)	0.0699* (0.0175)	0.0716* (0.0178)
High School	0.00329	0.0520*	0.0664*	0.112*	0.108*

	(0.0213)	(0.0180)	(0.0178)	(0.0197)	(0.0199)
University	0.00377	0.0486*	0.0899*	0.128*	0.140*
	(0.0269)	(0.0245)	(0.0233)	(0.0251)	(0.0250)

Table C8 Change in Predicted Probability of Nonwhite ID Relative to 1993. Computed from Model 4. ⁺ $p < .1$, * $p < .05$.

	(2)		(3)		(4)	
	Excl. Top Decile		Bottom 5 Deciles		Top Decile	
1998 x Primary	-0.043	(0.062)	-0.090	(0.073)	0.634	(0.591)
1998 x High School	-0.108	(0.085)	0.098	(0.133)	0.385	(0.578)
1998 x University	0.117	(0.196)	0.205	(0.599)	0.279	(0.586)
2003 x Primary	0.020	(0.060)	0.044	(0.072)	0.242	(0.561)
2003 x High School	0.146	(0.080) ⁺	0.298	(0.125)*	0.523	(0.545)
2003 x University	0.282	(0.184)	0.836	(0.529)	0.458	(0.551)
2008 x Primary	0.066	(0.061)	0.087	(0.074)	0.642	(0.522)
2008 x High School	0.201	(0.079)*	0.423	(0.121)*	0.857	(0.507) ⁺
2008 x University	0.570	(0.172)*	1.075	(0.467)*	0.669	(0.513)
2013 x Primary	0.029	(0.064)	0.074	(0.080)	0.630	(0.492)
2013 x High School	0.244	(0.081)*	0.475	(0.125)*	0.631	(0.478)
2013 x University	0.554	(0.173)*	1.108	(0.467)*	0.552	(0.484)
2015 x Primary	0.086	(0.065)	0.028	(0.081)	1.197	(0.497)*
2015 x High School	0.256	(0.081)*	0.495	(0.125)*	1.320	(0.483)*
2015 x University	0.573	(0.171)*	0.963	(0.465)*	1.333	(0.488)*
1998 x Income	0.020	(0.011) ⁺	0.013	(0.025)		
2003 x Income	0.019	(0.011) ⁺	0.011	(0.024)		
2008 x Income	0.014	(0.010)	0.016	(0.024)		
2013 x Income	0.022	(0.011)*	0.017	(0.026)		
2015 x Income	0.026	(0.011)*	0.046	(0.026) ⁺		
1998 x Female	0.107	(0.075)	0.082	(0.098)	0.156	(0.223)
2003 x Female	0.040	(0.070)	0.043	(0.092)	0.161	(0.208)
2008 x Female	0.064	(0.068)	0.126	(0.090)	0.113	(0.196)
2013 x Female	0.012	(0.069)	0.029	(0.093)	-0.040	(0.195)
2015 x Female	0.028	(0.068)	0.034	(0.092)	-0.053	(0.191)
1998 x Municip. native	0.063	(0.051)	0.053	(0.069)	0.134	(0.181)
2003 x Municip. native	0.069	(0.049)	0.089	(0.067)	-0.276	(0.171)
2008 x Municip. native	-0.093	(0.049) ⁺	-0.016	(0.068)	0.197	(0.163)
2013 x Municip. native	0.023	(0.051)	0.010	(0.073)	0.101	(0.164)
2015 x Municip. native	-0.004	(0.051)	0.054	(0.072)	0.143	(0.160)
1998 x State migrant	0.025	(0.076)	0.117	(0.104)	-0.059	(0.226)
2003 x State migrant	0.063	(0.076)	0.231	(0.105)*	-0.347	(0.212)
2008 x State migrant	-0.152	(0.083) ⁺	-0.270	(0.117)*	0.127	(0.209)
2013 x State migrant	0.072	(0.096)	0.052	(0.144)	-0.037	(0.232)
2015 x State migrant	-0.077	(0.103)	-0.209	(0.153)	-0.005	(0.239)
1998 x Cohort Lag	0.585	(1.890)	-0.984	(2.558)	10.904	(6.541) ⁺
2003 x Cohort Lag	1.921	(2.212)	0.356	(3.018)	-9.201	(7.315)

2008 x Cohort Lag	2.985	(2.319)	3.253	(3.287)	3.922	(7.096)
2013 x Cohort Lag	-0.256	(1.981)	-2.637	(2.892)	1.077	(5.917)
2015 x Cohort Lag	1.280	(1.829)	-0.977	(2.664)	6.323	(5.433)
1998	-0.453	(0.917)	-0.082	(1.247)	-6.511	(3.143)*
2003	-0.862	(1.092)	-0.034	(1.495)	4.307	(3.609)
2008	-1.624	(1.234)	-2.021	(1.755)	-2.613	(3.730)
2013	0.202	(1.065)	1.327	(1.566)	-0.911	(3.104)
2015	-0.665	(0.987)	0.245	(1.453)	-4.281	(2.822)
Primary	-0.325	(0.046)*	-0.306	(0.055)*	-0.928	(0.409)*
High School	-0.750	(0.064)*	-0.887	(0.102)*	-1.318	(0.401)*
University	-1.387	(0.157)*	-1.591	(0.447)*	-1.827	(0.407)*
Income	-0.092	(0.008)*	-0.066	(0.019)*		
Female	0.035	(0.060)	0.079	(0.078)	0.024	(0.172)
Municip. native	-0.092	(0.038)*	-0.112	(0.052)*	-0.060	(0.136)
State migrant	-0.021	(0.054)	-0.053	(0.074)	-0.142	(0.161)
Cohort Lag	0.862	(1.188)	1.811	(1.623)	-0.108	(4.200)
Constant	0.865	(0.581)	0.374	(0.799)	1.205	(2.020)
Interactive State FX	Y		Y		Y	
Observations	120468		61464		16942	
AIC	139551.998		70295.603		17285.052	

Table C9 Pseudo-Panel Estimates of Nonwhite Identification among Cohorts 3 and 4 and by Income Group. Robust standard errors in parentheses. ⁺ $p < .1$, * $p < .05$.

	1993	1998	2003	2008	2013	2015
< Primary	0.590 (0.0138)	0.607 (0.0159)	0.617 (0.0114)	0.611 (0.0119)	0.655 (0.0138)	0.649 (0.0146)
Primary	0.526 (0.0125)	0.535 (0.0155)	0.557 (0.0105)	0.560 (0.0113)	0.597 (0.0138)	0.603 (0.0143)
High School	0.441 (0.0153)	0.435 (0.0171)	0.496 (0.0121)	0.500 (0.0122)	0.553 (0.0153)	0.551 (0.0158)
University	0.318 (0.0298)	0.354 (0.0257)	0.393 (0.0203)	0.445 (0.0163)	0.484 (0.0193)	0.484 (0.0189)

Table C10 Predicted Probabilities of Nonwhite ID (Excluding Top Decile)

	1998	2003	2008	2013	2015
< Primary	0.0172 (0.0210)	0.0272 (0.0180)	0.0217 (0.0183)	0.0650* (0.0195)	0.0594* (0.0201)
Primary	0.00862 (0.0199)	0.0309+ (0.0163)	0.0338* (0.0168)	0.0707* (0.0186)	0.0768* (0.0190)
High School	-0.00541 (0.0230)	0.0552* (0.0195)	0.0595* (0.0196)	0.113* (0.0217)	0.110* (0.0220)
University	0.0359 (0.0394)	0.0756* (0.0361)	0.127* (0.0340)	0.167* (0.0355)	0.167* (0.0353)

Table C11 Change in Predicted Probability of Nonwhite ID Relative to 1993 (Excluding Top Decile) ⁺ $p < .1$, * $p < .05$.

	1993	1998	2003	2008	2013	2015
< Primary	0.687 (0.0159)	0.680 (0.0193)	0.684 (0.0129)	0.668 (0.0178)	0.717 (0.0195)	0.724 (0.0206)
Primary	0.630 (0.0160)	0.602 (0.0205)	0.634 (0.0127)	0.625 (0.0181)	0.674 (0.0209)	0.673 (0.0220)
High School	0.510 (0.0256)	0.518 (0.0263)	0.566 (0.0179)	0.575 (0.0206)	0.639 (0.0243)	0.651 (0.0251)
University	0.363 (0.0911)	0.390 (0.0859)	0.531 (0.0617)	0.564 (0.0336)	0.624 (0.0353)	0.603 (0.0349)

Table C12 Predicted Probabilities of Nonwhite ID (Bottom 5 Deciles)

	1998	2003	2008	2013	2015
< Primary	-0.00776 (0.0250)	-0.00335 (0.0205)	-0.0195 (0.0239)	0.0297 (0.0252)	0.0366 (0.0260)
Primary	-0.0281 (0.0260)	0.00414 (0.0204)	-0.00452 (0.0242)	0.0445+ (0.0263)	0.0432 (0.0272)
High School	0.00766 (0.0367)	0.0560+ (0.0313)	0.0645* (0.0329)	0.128* (0.0353)	0.140* (0.0359)
University	0.0265 (0.125)	0.168 (0.110)	0.201* (0.0971)	0.261* (0.0977)	0.240* (0.0975)

Table C13 Change in Predicted Probability of Nonwhite ID Relative to 1993 (Bottom 5 Deciles) ⁺ $p < .1$, * $p < .05$.

	1993	1998	2003	2008	2013	2015
< Primary	0.433 (0.0502)	0.450 (0.0476)	0.446 (0.0405)	0.418 (0.0350)	0.466 (0.0289)	0.350 (0.0293)
Primary	0.305 (0.0237)	0.325 (0.0217)	0.369 (0.0145)	0.384 (0.0123)	0.413 (0.0144)	0.396 (0.0148)
High School	0.247 (0.0205)	0.244 (0.0169)	0.303 (0.00954)	0.327 (0.00768)	0.333 (0.0109)	0.328 (0.0111)
University	0.167 (0.0180)	0.157 (0.0142)	0.211 (0.00879)	0.216 (0.00609)	0.232 (0.00863)	0.245 (0.00924)

Table C14 Predicted Probabilities of Nonwhite ID (Top Decile)

	1998	2003	2008	2013	2015
< Primary	0.0174 (0.0692)	0.0132 (0.0645)	-0.0145 (0.0612)	0.0336 (0.0579)	-0.0829 (0.0581)
Primary	0.0206 (0.0321)	0.0644* (0.0277)	0.0790* (0.0267)	0.109* (0.0277)	0.0911* (0.0279)
High School	-0.00320 (0.0265)	0.0560* (0.0226)	0.0800* (0.0219)	0.0862* (0.0232)	0.0815* (0.0233)
University	-0.00908 (0.0229)	0.0444* (0.0200)	0.0498* (0.0190)	0.0652* (0.0199)	0.0784* (0.0202)

Table C15 Change in Predicted Probability of Nonwhite ID Relative to 1993 (Top Decile) ⁺ $p < .1$, * $p < .05$.

	(1)	
	Full Sample	
1998 x Primary	-0.007	(0.039)
1998 x High School	0.009	(0.053)
1998 x University	-0.043	(0.084)
2003 x Primary	0.018	(0.037)
2003 x High School	0.181	(0.049)*
2003 x University	0.123	(0.078)
2008 x Primary	0.096	(0.037)*
2008 x High School	0.327	(0.049)*
2008 x University	0.382	(0.075)*
2013 x Primary	0.019	(0.039)
2013 x High School	0.250	(0.050)*
2013 x University	0.315	(0.075)*
2015 x Primary	0.094	(0.039)*
2015 x High School	0.293	(0.049)*
2015 x University	0.412	(0.074)*
1998 x Income	-0.004	(0.007)
2003 x Income	0.004	(0.006)
2008 x Income	0.003	(0.006)
2013 x Income	0.016	(0.006)*
2015 x Income	0.015	(0.006)*
1998 x Female	0.038	(0.042)
2003 x Female	0.049	(0.040)
2008 x Female	0.041	(0.038)
2013 x Female	0.000	(0.039)
2015 x Female	0.034	(0.038)
1998 x Municip. native	0.050	(0.032)
2003 x Municip. native	0.049	(0.031)
2008 x Municip. native	-0.020	(0.030)
2013 x Municip. native	0.036	(0.031)
2015 x Municip. native	0.024	(0.031)
1998 x State migrant	0.023	(0.048)
2003 x State migrant	0.028	(0.046)
2008 x State migrant	-0.090	(0.048)+
2013 x State migrant	0.050	(0.053)
2015 x State migrant	-0.020	(0.055)
1998 x Cohort Lag	-0.323	(0.599)
2003 x Cohort Lag	0.687	(0.564)
2008 x Cohort Lag	1.288	(0.557)*
2013 x Cohort Lag	2.151	(0.630)*
2015 x Cohort Lag	3.123	(0.588)*
1998	0.149	(0.321)
2003	-0.074	(0.305)
2008	-0.596	(0.309)+
2013	-1.118	(0.353)*

2015	-1.529	(0.333)*
Primary	-0.319	(0.029)*
High School	-0.822	(0.040)*
University	-1.477	(0.065)*
Income	-0.092	(0.005)*
Female	0.044	(0.034)
Municip. native	-0.100	(0.024)*
State migrant	-0.082	(0.035)*
Cohort Lag	1.373	(0.437)*
Constant	0.553	(0.234)*
Interactive State FX	Y	
Observations	363,968	
AIC	414725.317	

Table C16 Pseudo-Panel Estimates of Nonwhite Identification among All Cohorts, Full Sample. Robust standard errors in parentheses. ⁺ $p < .1$, * $p < .05$.

	1993	1998	2003	2008	2013	2015
< Primary	0.574 (0.00697)	0.577 (0.00631)	0.596 (0.00455)	0.596 (0.00406)	0.623 (0.00498)	0.608 (0.00522)
Primary	0.512 (0.00584)	0.513 (0.00505)	0.536 (0.00312)	0.551 (0.00294)	0.564 (0.00447)	0.564 (0.00470)
High School	0.413 (0.00774)	0.416 (0.00640)	0.468 (0.00407)	0.495 (0.00384)	0.508 (0.00540)	0.502 (0.00558)
University	0.291 (0.0113)	0.284 (0.00920)	0.327 (0.00721)	0.373 (0.00603)	0.386 (0.00686)	0.393 (0.00676)

Table C17 Predicted Probabilities of Nonwhite ID (Full Sample)

	1998	2003	2008	2013	2015
< Primary	0.00333 (0.00941)	0.0216* (0.00833)	0.0220* (0.00807)	0.0491* (0.00857)	0.0336* (0.00871)
Primary	0.00102 (0.00772)	0.0243* (0.00662)	0.0393* (0.00654)	0.0517* (0.00736)	0.0515* (0.00749)
High School	0.00291 (0.0100)	0.0547* (0.00875)	0.0825* (0.00864)	0.0949* (0.00944)	0.0889* (0.00954)
University	-0.00720 (0.0146)	0.0361* (0.0134)	0.0819* (0.0128)	0.0951* (0.0132)	0.102* (0.0131)

Table C18 Change in Predicted Probability of Nonwhite ID Relative to 1993 (Full Sample)

⁺ $p < .1$, * $p < .05$.

	(2)		(3)		(4)	
	Excl. Top Decile		Bottom 5 Deciles		Top Decile	
1998 x Primary	-0.014	(0.039)	-0.048	(0.048)	0.046	(0.333)
1998 x High School	0.023	(0.055)	0.217	(0.092)*	-0.085	(0.325)
1998 x University	0.139	(0.121)	-0.013	(0.378)	-0.136	(0.328)
2003 x Primary	0.010	(0.037)	-0.008	(0.046)	0.291	(0.324)
2003 x High School	0.189	(0.052)*	0.318	(0.084)*	0.270	(0.317)
2003 x University	0.249	(0.113)*	0.446	(0.340)	0.259	(0.320)
2008 x Primary	0.084	(0.038)*	0.074	(0.047)	0.520	(0.306)+
2008 x High School	0.314	(0.051)*	0.483	(0.081)*	0.569	(0.298)+
2008 x University	0.556	(0.106)*	0.757	(0.303)*	0.480	(0.301)
2013 x Primary	0.004	(0.040)	-0.004	(0.050)	0.432	(0.287)
2013 x High School	0.247	(0.052)*	0.423	(0.083)*	0.367	(0.279)
2013 x University	0.455	(0.105)*	0.679	(0.299)*	0.351	(0.281)
2015 x Primary	0.075	(0.040)+	0.036	(0.051)	0.939	(0.294)*
2015 x High School	0.278	(0.052)*	0.412	(0.082)*	0.930	(0.286)*
2015 x University	0.449	(0.104)*	0.727	(0.296)*	1.013	(0.288)*
1998 x Income	-0.001	(0.007)	-0.004	(0.016)		
2003 x Income	0.008	(0.007)	-0.001	(0.016)		
2008 x Income	0.010	(0.007)	0.017	(0.016)		
2013 x Income	0.024	(0.007)*	0.032	(0.016)*		
2015 x Income	0.023	(0.007)*	0.039	(0.016)*		
1998 x Female	0.054	(0.045)	0.045	(0.061)	-0.159	(0.138)
2003 x Female	0.040	(0.042)	0.009	(0.057)	0.057	(0.126)
2008 x Female	0.034	(0.040)	0.064	(0.055)	0.044	(0.119)
2013 x Female	0.001	(0.041)	0.012	(0.056)	-0.066	(0.119)
2015 x Female	0.033	(0.041)	0.036	(0.056)	-0.025	(0.118)
1998 x Municip. native	0.052	(0.034)	0.052	(0.046)	0.034	(0.115)
2003 x Municip. native	0.054	(0.032)+	0.072	(0.044)+	0.013	(0.105)
2008 x Municip. native	-0.038	(0.031)	0.003	(0.044)	0.121	(0.101)
2013 x Municip. native	0.031	(0.033)	0.044	(0.046)	0.091	(0.101)
2015 x Municip. native	0.017	(0.032)	0.070	(0.046)	0.097	(0.100)
1998 x State migrant	0.034	(0.051)	0.098	(0.070)	-0.024	(0.146)
2003 x State migrant	0.068	(0.049)	0.146	(0.068)*	-0.239	(0.136)+
2008 x State migrant	-0.081	(0.052)	-0.153	(0.072)*	-0.037	(0.133)
2013 x State migrant	0.116	(0.059)+	0.124	(0.084)	-0.096	(0.139)
2015 x State migrant	0.025	(0.061)	0.053	(0.087)	-0.155	(0.147)
1998 x Cohort Lag	-0.429	(0.616)	-0.742	(0.834)	1.736	(2.574)
2003 x Cohort Lag	0.289	(0.585)	-0.128	(0.797)	5.457	(2.283)*
2008 x Cohort Lag	1.078	(0.583)+	0.738	(0.809)	3.404	(2.188)
2013 x Cohort Lag	1.795	(0.665)*	0.412	(0.947)	4.891	(2.305)*
2015 x Cohort Lag	2.790	(0.618)*	1.466	(0.876)+	6.124	(2.225)*
1998	0.229	(0.332)	0.387	(0.465)	-1.270	(1.302)
2003	0.102	(0.317)	0.428	(0.438)	-2.515	(1.176)*
2008	-0.502	(0.323)	-0.397	(0.452)	-1.950	(1.144)+
2013	-0.966	(0.373)*	-0.266	(0.535)	-2.548	(1.219)*

2015	-1.364	(0.352)*	-0.687	(0.504)	-3.719	(1.172)*
Primary	-0.321	(0.029)*	-0.288	(0.036)*	-0.695	(0.242)*
High School	-0.809	(0.042)*	-0.915	(0.070)*	-1.046	(0.237)*
University	-1.410	(0.095)*	-1.506	(0.285)*	-1.623	(0.239)*
Income	-0.081	(0.005)*	-0.067	(0.013)*		
Female	0.045	(0.035)	0.104	(0.048)*	0.061	(0.106)
Municip. native	-0.096	(0.025)*	-0.095	(0.035)*	-0.112	(0.086)
State migrant	-0.077	(0.037)*	-0.114	(0.051)*	-0.123	(0.105)
Cohort Lag	1.439	(0.449)*	1.500	(0.609)*	-0.350	(1.950)
Constant	0.441	(0.242)+	0.251	(0.333)	0.838	(0.982)
Interactive State FX	Y		Y		Y	
Observations	317,595		160,967		46,373	
AIC	367159.037		183383.226		46868.049	

Table C19 Pseudo-Panel Estimates of Nonwhite Identification among All Cohorts and by Income Group. Robust standard errors in parentheses. + $p < .1$, * $p < .05$.

	1993	1998	2003	2008	2013	2015
< Primary	0.597 (0.00696)	0.601 (0.00628)	0.618 (0.00448)	0.620 (0.00399)	0.648 (0.00506)	0.634 (0.00536)
Primary	0.535 (0.00603)	0.535 (0.00519)	0.556 (0.00317)	0.573 (0.00307)	0.585 (0.00481)	0.586 (0.00507)
High School	0.437 (0.00859)	0.443 (0.00704)	0.493 (0.00452)	0.519 (0.00431)	0.534 (0.00605)	0.528 (0.00626)
University	0.321 (0.0175)	0.347 (0.0144)	0.382 (0.0116)	0.444 (0.00882)	0.452 (0.00932)	0.438 (0.00879)

Table C20 Predicted Probabilities of Nonwhite ID (Excluding Top Decile)

	1998	2003	2008	2013	2015
< Primary	0.00377 (0.00938)	0.0203* (0.00828)	0.0231* (0.00803)	0.0504* (0.00861)	0.0366* (0.00879)
Primary	-3.12e-06 (0.00795)	0.0214* (0.00681)	0.0382* (0.00676)	0.0504* (0.00771)	0.0511* (0.00788)
High School	0.00606 (0.0111)	0.0557* (0.00971)	0.0821* (0.00961)	0.0973* (0.0105)	0.0905* (0.0106)
University	0.0262 (0.0227)	0.0608* (0.0210)	0.123* (0.0196)	0.130* (0.0199)	0.117* (0.0196)

Table C21 Change in Predicted Probability of Nonwhite ID Relative to 1993 (Excluding Top Decile) + $p < .1$, * $p < .05$.

	1993	1998	2003	2008	2013	2015
< Primary	0.682 (0.00825)	0.680 (0.00754)	0.690 (0.00497)	0.689 (0.00463)	0.716 (0.00657)	0.709 (0.00720)
Primary	0.627 (0.00812)	0.614 (0.00704)	0.632 (0.00410)	0.648 (0.00452)	0.660 (0.00727)	0.662 (0.00780)
High School	0.499 (0.0158)	0.538 (0.0131)	0.570 (0.00836)	0.603 (0.00739)	0.620 (0.00966)	0.612 (0.0102)
University	0.375 (0.0583)	0.362 (0.0512)	0.469 (0.0405)	0.535 (0.0221)	0.548 (0.0203)	0.553 (0.0182)

Table C22 Predicted Probabilities of Nonwhite ID (Bottom 5 Deciles)

	1998	2003	2008	2013	2015
< Primary	-0.00173 (0.0112)	0.00821 (0.00963)	0.00747 (0.00946)	0.0341* (0.0105)	0.0277* (0.0109)
Primary	-0.0137 (0.0107)	0.00508 (0.00910)	0.0201* (0.00929)	0.0330* (0.0109)	0.0347* (0.0113)
High School	0.0388+ (0.0205)	0.0712* (0.0179)	0.104* (0.0174)	0.121* (0.0185)	0.113* (0.0188)
University	-0.0136 (0.0776)	0.0941 (0.0710)	0.159* (0.0624)	0.173* (0.0618)	0.178* (0.0611)

Table C23 Change in Predicted Probability of Nonwhite ID Relative to 1993 (Bottom 5 Deciles) ⁺ $p < .1$, * $p < .05$.

	1993	1998	2003	2008	2013	2015
< Primary	0.433 (0.0502)	0.450 (0.0476)	0.446 (0.0405)	0.418 (0.0350)	0.466 (0.0289)	0.350 (0.0293)
Primary	0.305 (0.0237)	0.325 (0.0217)	0.369 (0.0145)	0.384 (0.0123)	0.413 (0.0144)	0.396 (0.0148)
High School	0.247 (0.0205)	0.244 (0.0169)	0.303 (0.00954)	0.327 (0.00768)	0.333 (0.0109)	0.328 (0.0111)
University	0.167 (0.0180)	0.157 (0.0142)	0.211 (0.00879)	0.216 (0.00609)	0.232 (0.00863)	0.245 (0.00924)

Table C24 Predicted Probabilities of Nonwhite ID (Top Decile)

	1998	2003	2008	2013	2015
< Primary	0.0174 (0.0692)	0.0132 (0.0645)	-0.0145 (0.0612)	0.0336 (0.0579)	-0.0829 (0.0581)
Primary	0.0206 (0.0321)	0.0644* (0.0277)	0.0790* (0.0267)	0.109* (0.0277)	0.0911* (0.0279)
High School	-0.00320 (0.0265)	0.0560* (0.0226)	0.0800* (0.0219)	0.0862* (0.0232)	0.0815* (0.0233)
University	-0.00908 (0.0229)	0.0444* (0.0200)	0.0498* (0.0190)	0.0652* (0.0199)	0.0784* (0.0202)

Table C25 Change in Predicted Probability of Nonwhite ID Relative to 1993 (Top Decile) ⁺ $p < .1$, * $p < .05$.

	Brown ID vs. White ID		Black ID vs. White ID	
1998 x Primary	-0.048	(0.063)	0.007	(0.114)
1998 x High School	-0.114	(0.087)	0.013	(0.184)
1998 x University	0.099	(0.205)	0.349	(0.539)
2003 x Primary	-0.002	(0.061)	0.174	(0.110)
2003 x High School	0.093	(0.083)	0.561	(0.169)*
2003 x University	0.201	(0.193)	0.882	(0.502)+
2008 x Primary	0.052	(0.062)	0.175	(0.108)
2008 x High School	0.134	(0.081)+	0.663	(0.163)*
2008 x University	0.525	(0.180)*	0.985	(0.483)*
2013 x Primary	0.027	(0.066)	0.088	(0.110)
2013 x High School	0.193	(0.084)*	0.628	(0.164)*
2013 x University	0.518	(0.181)*	0.927	(0.481)+
2015 x Primary	0.079	(0.066)	0.167	(0.109)
2015 x High School	0.189	(0.084)*	0.698	(0.162)*
2015 x University	0.504	(0.180)*	1.073	(0.478)*
1998 x Income Decile	0.018	(0.011)	0.035	(0.022)
2003 x Income Decile	0.014	(0.011)	0.044	(0.020)*
2008 x Income Decile	0.010	(0.011)	0.038	(0.020)+
2013 x Income Decile	0.017	(0.011)	0.047	(0.020)*
2015 x Income Decile	0.026	(0.011)*	0.034	(0.020)+
1998 x Female	0.097	(0.076)	0.104	(0.136)
2003 x Female	0.040	(0.071)	-0.020	(0.126)
2008 x Female	0.075	(0.069)	-0.060	(0.122)
2013 x Female	0.028	(0.070)	-0.141	(0.122)
2015 x Female	0.032	(0.070)	-0.092	(0.121)
1998 x Municip. native	0.054	(0.053)	0.077	(0.101)
2003 x Municip. native	0.079	(0.051)	-0.033	(0.095)
2008 x Municip. native	-0.078	(0.051)	-0.224	(0.093)*
2013 x Municip. native	0.027	(0.053)	-0.071	(0.094)
2015 x Municip. native	0.026	(0.053)	-0.200	(0.093)*
1998 x State migrant	0.025	(0.076)	0.091	(0.168)
2003 x State migrant	0.056	(0.076)	0.186	(0.161)
2008 x State migrant	-0.140	(0.083)+	-0.108	(0.169)
2013 x State migrant	0.059	(0.096)	0.272	(0.178)
2015 x State migrant	-0.064	(0.101)	0.003	(0.186)
1998 x Cohort Lag	0.117	(1.957)	3.537	(3.697)
2003 x Cohort Lag	2.036	(2.295)	1.697	(4.122)
2008 x Cohort Lag	2.422	(2.407)	5.886	(4.084)
2013 x Cohort Lag	0.033	(2.057)	-0.934	(3.488)
2015 x Cohort Lag	2.070	(1.899)	-1.200	(3.223)
1998	-0.215	(0.949)	-1.898	(1.865)
2003	-0.869	(1.135)	-0.987	(2.082)
2008	-1.412	(1.282)	-2.215	(2.185)
2013	-0.029	(1.109)	1.440	(1.882)
2015	-1.251	(1.026)	1.943	(1.738)

Primary	-0.309	(0.047)*	-0.440	(0.087)*
High School	-0.707	(0.066)*	-1.105	(0.145)*
University	-1.338	(0.164)*	-1.816	(0.465)*
Income Decile	-0.090	(0.008)*	-0.106	(0.017)*
Female	-0.000	(0.060)	0.271	(0.111)*
Municip. native	-0.119	(0.040)*	0.096	(0.078)
State migrant	0.006	(0.053)	-0.287	(0.125)*
Cohort Lag	1.026	(1.225)	-0.278	(2.448)
Constant	0.705	(0.601)	-1.373	(1.255)

Interactive State FX Y Y

Table C26 Multinomial Logit Pseudo-Panel Estimates (Excluding Top Income Decile). ⁺ $p < .1$, ^{*} $p < .05$. Standard errors in parentheses. N = 120,468, AIC = 195143.493.

		1993	1998	2003	2008	2013	2015
White ID	< Primary	0.410 (0.0137)	0.392 (0.0160)	0.383 (0.0114)	0.388 (0.0119)	0.345 (0.0139)	0.350 (0.0146)
	Primary	0.474 (0.0125)	0.465 (0.0155)	0.443 (0.0105)	0.440 (0.0113)	0.403 (0.0138)	0.397 (0.0144)
	High School	0.559 (0.0154)	0.565 (0.0172)	0.504 (0.0121)	0.500 (0.0123)	0.446 (0.0155)	0.447 (0.0159)
	University	0.682 (0.0303)	0.647 (0.0259)	0.607 (0.0206)	0.555 (0.0167)	0.516 (0.0194)	0.514 (0.0192)
	< Primary	0.521 (0.0142)	0.512 (0.0170)	0.532 (0.0121)	0.514 (0.0120)	0.521 (0.0151)	0.500 (0.0155)
	Primary	0.472 (0.0126)	0.457 (0.0157)	0.479 (0.0109)	0.471 (0.0112)	0.482 (0.0143)	0.469 (0.0146)
Brown ID	High School	0.406 (0.0152)	0.383 (0.0167)	0.426 (0.0121)	0.412 (0.0119)	0.438 (0.0154)	0.415 (0.0153)
	University	0.296 (0.0300)	0.311 (0.0252)	0.333 (0.0203)	0.376 (0.0164)	0.391 (0.0189)	0.367 (0.0180)
	< Primary	0.0695 (0.00850)	0.0960 (0.0131)	0.0850 (0.00771)	0.0980 (0.00633)	0.134 (0.0116)	0.150 (0.0128)
	Primary	0.0543 (0.00625)	0.0776 (0.0104)	0.0784 (0.00644)	0.0888 (0.00531)	0.115 (0.00996)	0.134 (0.0114)
Black ID	High School	0.0349 (0.00556)	0.0520 (0.00821)	0.0702 (0.00658)	0.0882 (0.00595)	0.116 (0.0108)	0.137 (0.0123)
	University	0.0226 (0.0103)	0.0429 (0.0120)	0.0609 (0.0108)	0.0694 (0.00798)	0.0929 (0.0118)	0.119 (0.0135)

Table C27 Predicted Probabilities of White, Brown, and Black ID

		1998	2003	2008	2013	2015
White ID	< Primary	-0.0182 (0.0211)	-0.0266 (0.0178)	-0.0215 (0.0182)	-0.0649* (0.0195)	-0.0600* (0.0200)
	Primary	-0.00909 (0.0199)	-0.0310+ (0.0163)	-0.0342* (0.0168)	-0.0707* (0.0186)	-0.0774* (0.0190)
	High School	0.00574 (0.0230)	-0.0553* (0.0196)	-0.0594* (0.0197)	-0.113* (0.0218)	-0.112* (0.0221)
	University	-0.0353 (0.0398)	-0.0753* (0.0366)	-0.127* (0.0346)	-0.166* (0.0360)	-0.167* (0.0359)
Brown ID	< Primary	-0.00819 (0.0221)	0.0111 (0.0186)	-0.00695 (0.0185)	0.000596 (0.0207)	-0.0201 (0.0210)
	Primary	-0.0143 (0.0201)	0.00686 (0.0166)	-0.000307 (0.0168)	0.00996 (0.0190)	-0.00251 (0.0193)
	High School	-0.0229 (0.0226)	0.0199 (0.0195)	0.00611 (0.0193)	0.0320 (0.0217)	0.00942 (0.0216)
	University	0.0150 (0.0391)	0.0370 (0.0362)	0.0804* (0.0342)	0.0960* (0.0354)	0.0715* (0.0350)
Black ID	< Primary	0.0264+ (0.0156)	0.0155 (0.0115)	0.0285* (0.0106)	0.0643* (0.0144)	0.0801* (0.0154)
	Primary	0.0234+ (0.0121)	0.0241* (0.00897)	0.0345* (0.00820)	0.0608* (0.0118)	0.0799* (0.0130)
	High School	0.0171+ (0.00992)	0.0353* (0.00862)	0.0533* (0.00814)	0.0808* (0.0121)	0.102* (0.0135)
	University	0.0203 (0.0158)	0.0383* (0.0149)	0.0468* (0.0130)	0.0703* (0.0157)	0.0959* (0.0170)

Table C28 Change in Predicted Probability of Racial ID Relative to 1993 ⁺ $p < .1$, ^{*} $p < .05$.

APPENDIX D

SURVEY EXPERIMENTS: TESTING THE INSTRUMENTAL HYPOTHESIS

		White	Nonwhite	Brown	Black
Brazil		47.7	50.8	43.0	7.8
Regions (IBGE)	Northeast	29.1	69.3	59.5	9.9
	Southeast	55.0	43.7	35.6	8.1
States (IBGE)	Pernambuco	36.2	62.2	55.5	6.7
	São Paulo	63.7	34.8	29.1	5.7
Capital Cities (IBGE)	Recife/PE	37.2	61.5	52.8	8.8
	São Paulo/SP	58.6	39.4	32.8	6.6
Stratified Random Sample	Full Sample	39.6	59.6	40.3	19.3
	Recife/PE	26.6	72.6	48.8	23.8
	São Paulo/SP	52.6	46.6	31.8	14.8

Table D1 Racial Representativeness of Stratified Random Survey Sample compared to 2010 Census (IBGE). Nonwhite is the sum of black and brown identifiers. IBGE data comes from Table 1379, accessible at sidra.ibge.gov.br.

This survey was designed to compare Brazilians of varied skin tones within levels of education, and therefore stratified the sample by levels of education (less than primary, completed primary, completed high school, and some university or higher). Because nonwhite Brazilians are underrepresented in secondary and higher education, we oversampled darker skinned Brazilians in higher education groups, producing a sample that is, on average, slightly darker than the overall Brazilian population according to the 2010 census. Comparisons with the census data nonetheless show the sample is close to the national population, with whites under-sampled and blacks oversampled.

Priming Experiment

	Control	Treatment
English	Now I am going to ask you specifically about your color and racial identification.	Now I am going to ask you specifically about your color and racial identification. <i>In recent years, the government began to reserve slots for blacks and browns in public universities and in civil servant exams.</i>
Portuguese	Agora vou perguntar especificamente sobre sua identificação de cor e raça.	Agora vou perguntar especificamente sobre sua identificação de cor e raça. <i>Nos anos recentes, o governo começou a reservar vagas para pretos e pardos nas faculdades públicas e nos concursos públicos.</i>

Table D2 Experimental Design: Priming Respondents with Information about Material Benefits

Variable	Obs.	Mean	St. Dev.	Min	Max
Treatment	484	0.508265	0.500449	0	1
Income	444	0.828819	0.767104	0	5.666667
Age	484	4.061983	1.62236	1.8	8.4
Female	484	0.493802	0.500479	0	1
Recife	484	0.497934	0.500513	0	1
Education	484	2.545455	1.121962	1	4
Hair Type	484	3.475207	2.069548	1	6
Skin tone	484	1.799587	0.75258	1	3

Table D3 Summary Statistics of experimental sample

	Variable	(A) Control	(B) Treatment	(A) – (B)	T-Statistic
	Income	861.56	783.68	77.88	1.10
	Age	41.02	40.13	0.90	0.62
	Female	0.51	0.47	0.04	1.01
	City	0.49	0.52	-0.03	-0.75
	Education	2.53	2.54	-0.01	-0.15
	Hair type	3.18	3.19	-0.02	-0.12
	Skin tone	4.69	4.37	0.32	1.22
	N	243	262	-	-

Table D4 Covariate Balance Tests

	(1) White ID	(2) White ID	(3) Brown ID	(4) Brown ID	(5) Black ID	(6) Black ID
Treatment	-0.008 (0.043)	-0.032 (0.036)	0.036 (0.046)	0.033 (0.048)	-0.028 (0.039)	-0.001 (0.033)
Recife		-0.042 (0.039)		0.067 (0.053)		-0.025 (0.036)
Age		0.028 (0.012)*		-0.017 (0.016)		-0.011 (0.011)
Female		-0.035 (0.037)		-0.002 (0.050)		0.036 (0.034)
Education		-0.013 (0.018)		0.010 (0.024)		0.003 (0.016)
Income		0.026 (0.026)		-0.044 (0.035)		0.018 (0.024)
Skin tone		-0.336 (0.029)*		0.030 (0.039)		0.306 (0.027)*
Constant	0.314 (0.030)*	0.918 (0.092)*	0.445 (0.033)*	0.420 (0.125)*	0.242 (0.027)*	-0.338 (0.085)*
N	475	436	475	436	475	436
R ²	0.000	0.393	0.001	0.035	0.001	0.374

Table D5 Treatment Effects on Dichotomized Census Categories

Standard errors in parentheses. + $p < .1$, * $p < .05$

	(1)	(2)	(3)	(4)	(5)	(6)
	White ID	White ID	Brown ID	Brown ID	Black ID	Black ID
Treatment x Medium	-0.002 (0.073)	-0.010 (0.078)	0.044 (0.094)	0.051 (0.100)	-0.041 (0.068)	-0.041 (0.071)
Treatment x Dark	0.031 (0.089)	0.018 (0.094)	-0.058 (0.115)	-0.059 (0.121)	0.028 (0.083)	0.041 (0.085)
Treatment Medium	-0.031 (0.051)	-0.023 (0.054)	0.011 (0.066)	0.008 (0.069)	0.019 (0.047)	0.015 (0.049)
Dark	-0.566 (0.053)*	-0.527 (0.060)*	0.381 (0.068)*	0.390 (0.077)*	0.185 (0.049)*	0.138 (0.055)*
Recife	-0.681 (0.060)*	-0.631 (0.072)*	-0.018 (0.078)	-0.012 (0.093)	0.698 (0.056)*	0.643 (0.066)*
Age		-0.018 (0.038)		0.017 (0.049)		0.000 (0.035)
Female		0.019 (0.012) ⁺		-0.001 (0.015)		-0.019 (0.010) ⁺
Education		-0.051 (0.036)		0.031 (0.047)		0.020 (0.033)
Income		-0.023 (0.017)		0.030 (0.022)		-0.007 (0.016)
Constant		0.022 (0.025)		-0.037 (0.032)		0.015 (0.023)
Constant	0.681 (0.037)*	0.690 (0.086)*	0.309 (0.047)*	0.241 (0.110)*	0.011 (0.034)	0.069 (0.078)
<i>N</i>	475	436	475	436	475	436
<i>R</i> ²	0.415	0.440	0.171	0.193	0.394	0.429

Table D6 Testing for Heterogeneous Treatment Effects by Skin Tone

Standard errors in parentheses

⁺ $p < .1$, * $p < .05$

	(1)	(2)	(3)	(4)	(5)	(6)
	White ID	White ID	Brown ID	Brown ID	Black ID	Black ID
Treatment x Primary	-0.025 (0.123)	-0.117 (0.102)	0.194 (0.132)	0.242 (0.138) ⁺	-0.168 (0.111)	-0.125 (0.094)
Treatment x High School	0.029 (0.121)	-0.097 (0.101)	0.178 (0.130)	0.269 (0.136) [*]	-0.207 (0.110) ⁺	-0.172 (0.093) ⁺
Treatment x University	0.040 (0.120)	0.012 (0.101)	-0.045 (0.129)	0.040 (0.136)	0.005 (0.109)	-0.052 (0.092)
Treatment	-0.012 (0.087)	0.022 (0.072)	-0.054 (0.093)	-0.110 (0.097)	0.066 (0.079)	0.088 (0.066)
Primary	-0.056 (0.086)	0.012 (0.073)	0.015 (0.093)	-0.014 (0.099)	0.041 (0.078)	0.002 (0.068)
High School	-0.102 (0.086)	-0.069 (0.074)	0.053 (0.092)	0.010 (0.100)	0.049 (0.078)	0.059 (0.068)
University	0.040 (0.082)	-0.027 (0.076)	0.035 (0.088)	0.005 (0.102)	-0.075 (0.074)	0.022 (0.069)
Recife		-0.049 (0.039)		0.081 (0.053)		-0.032 (0.036)
Age		0.027 (0.012) [*]		-0.013 (0.016)		-0.013 (0.011)
Female		-0.037 (0.037)		0.002 (0.050)		0.035 (0.034)
Income		0.020 (0.026)		-0.034 (0.035)		0.014 (0.024)
Skin tone		-0.339 (0.029) [*]		0.035 (0.039)		0.304 (0.027) [*]
Constant	0.339 (0.059) [*]	0.925 (0.093) [*]	0.419 (0.063) [*]	0.402 (0.125) [*]	0.242 (0.053) [*]	-0.327 (0.085) [*]
<i>N</i>	475	436	475	436	475	436
<i>R</i> ²	0.017	0.405	0.028	0.062	0.018	0.383

Table D7 Testing for Heterogeneous Treatment Effects by Education

Standard errors in parentheses

⁺ $p < .1$, ^{*} $p < .05$

List Experiment

	(A)	(B)		
Variable	Control	Treatment	(A) – (B)	T-Statistic
Income	0.80	0.82	-0.02	-0.42
Age	4.06	4.00	0.06	0.62
Female	0.51	0.52	-0.01	-0.29
City	0.50	0.49	0.01	0.16
Education	2.55	2.59	-0.04	-0.60
Hair type	3.57	3.43	0.14	1.06
Skin tone	1.77	1.82	-0.05	-1.08
Interviewer-Classified Race	1.79	1.84	-0.06	-1.20
N	498	495	-	-

Table D8 Covariate Balance Tests of Treatment and Control Groups. Due to missingness balance test for income includes 458 control and 447 treatment observations.

Row		Item Counts					Sum
		0	1	2	3	4	
1	Treatment	0.602	0.313	0.057	0.018	0.010	1.000
2	Treatment “at least”	1.000	0.398	0.085	0.028	0.010	
3	Control	0.584	0.309	0.084	0.022	0.000	1.000
4	Control “at least”	1.000	0.416	0.107	0.022	0.000	
5	2-4 Joint	0.000	-0.018	-0.022	0.006	0.010	-0.023
6	2-4 Conditional	0	-0.057	-0.382	0.335	n/a	
	Row 5 p-value	0.57	0.89	0.08	0.66	n/a	

Table D27 Evaluating Design Effects Assumption (Glynn 2013). Row 5 values for counts 1 and 2 are negative, suggesting a possible design effect. However difference-in-proportion tests do not reveal significant differences (p-values of 0.89 and 0.16, respectively).

Response (Y_i)	Treatment ($T_i=1$)		Control ($T_i=0$)	
	Est.	S.E.	Est.	S.E.
3	0.0101	0.0045	0.0120	0.0080
2	0.0062	0.0099	0.0781	0.0157
1	-0.0216	0.0187	0.3308	0.0254
0	-0.0177	0.0312	0.6020	0.0220

Table D28 Blair and Imai’s (2010, 2012) Statistical Test for Design Effects. Bonferroni-corrected p-value = 0.43.

	Full Sample		“At Least 1”	
	Mean	N	Mean	N
Control	0.544 (0.033)	498	1.309 (0.039)	207
Treatment	0.521 (0.035)	495	1.310 (0.048)	197
Difference	0.023 (0.048)	-	-0.000 (0.062)	-
T-Statistic	0.48	-	-0.01	-

Table D29 Difference-in-Means Estimates. “At Least 1” reports means and difference among respondents claiming to have completed at least 1 activity listed.

Variables	Least Squares Estimator				Maximum Likelihood Estimator					
	Linear		Nonlinear		Constrained		Unconstrained			
	Est.	SE	Est.	SE	Est.	SE	Est.	SE	Est.	SE
Sensitive Item										
Intercept	0.16	(0.26)	4.93	(5.71)	2.94	(1.79)	-5.06	(1.41)		
Age	-0.00	(0.00)	-0.09	(0.08)	-0.08	(0.03)	0.02	(0.02)		
Female	0.04	(0.09)	1.46	(2.38)	0.94	(0.75)	-0.72	(0.60)		
Education	-0.01	(0.04)	1.23	(1.15)	-0.73	(0.36)	0.23	(0.26)		
Skin tone	-0.04	(0.06)	-2.54	(2.69)	-0.88	(0.53)	0.37	(0.35)		
Control Item										
							$h0(y;x,psi0)$		$h1(y;x,psi1)$	
Intercept	1.16	(0.18)	-0.28	(0.42)	-0.33	(0.31)	0.30	(0.31)	7.56	(2.89)
Age	-0.01	(0.00)	-0.03	(0.01)	-0.03	(0.00)	-0.04	(0.01)	-0.11	(0.04)
Female	-0.26	(0.06)	-0.60	(0.16)	-0.68	(0.12)	-0.51	(0.12)	-0.51	(0.90)
Education	0.03	(0.03)	0.10	(0.08)	0.14	(0.06)	0.05	(0.06)	-0.23	(0.36)
Skin tone	0.03	(0.04)	-0.07	(0.11)	-0.06	(0.08)	-0.18	(0.09)	-0.65	(0.49)

Table D33 Estimated Coefficients and odds ratios from multivariate analysis of list experiment. The sensitive item is whether or not the respondents manipulated her racial ID in the past to claim affirmative action benefits. N = 993.

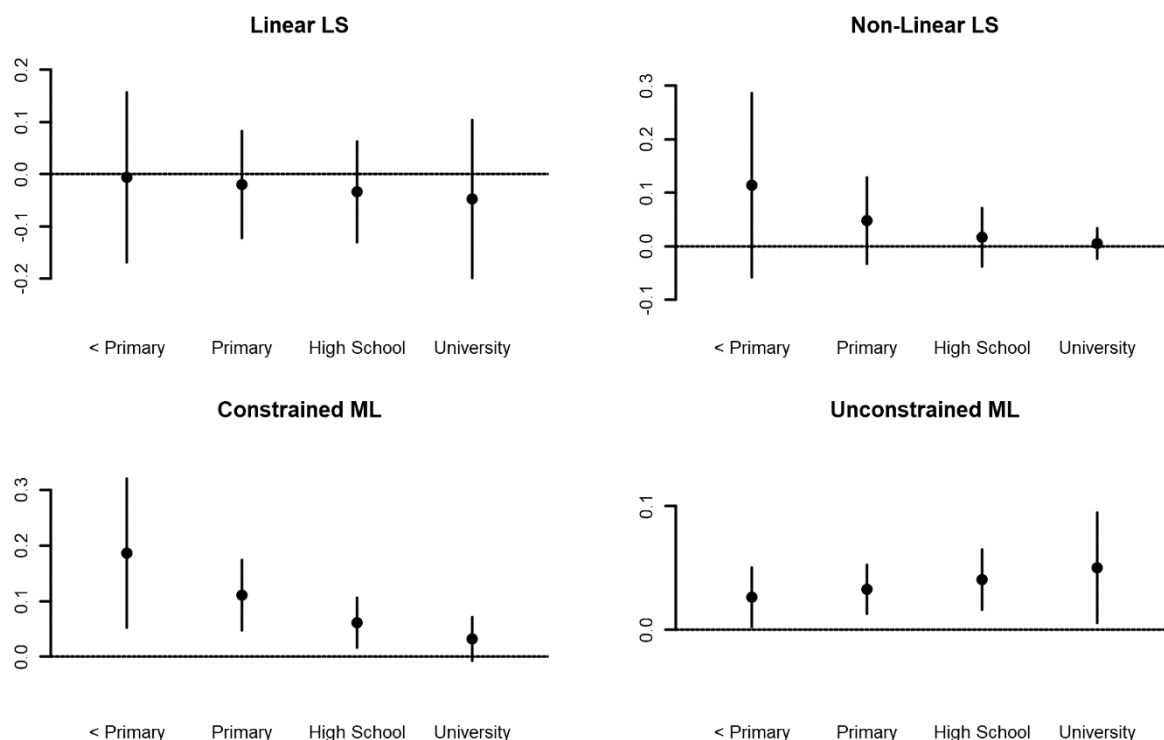


Figure D1 Estimates of Affirmative Responses by Education and Model

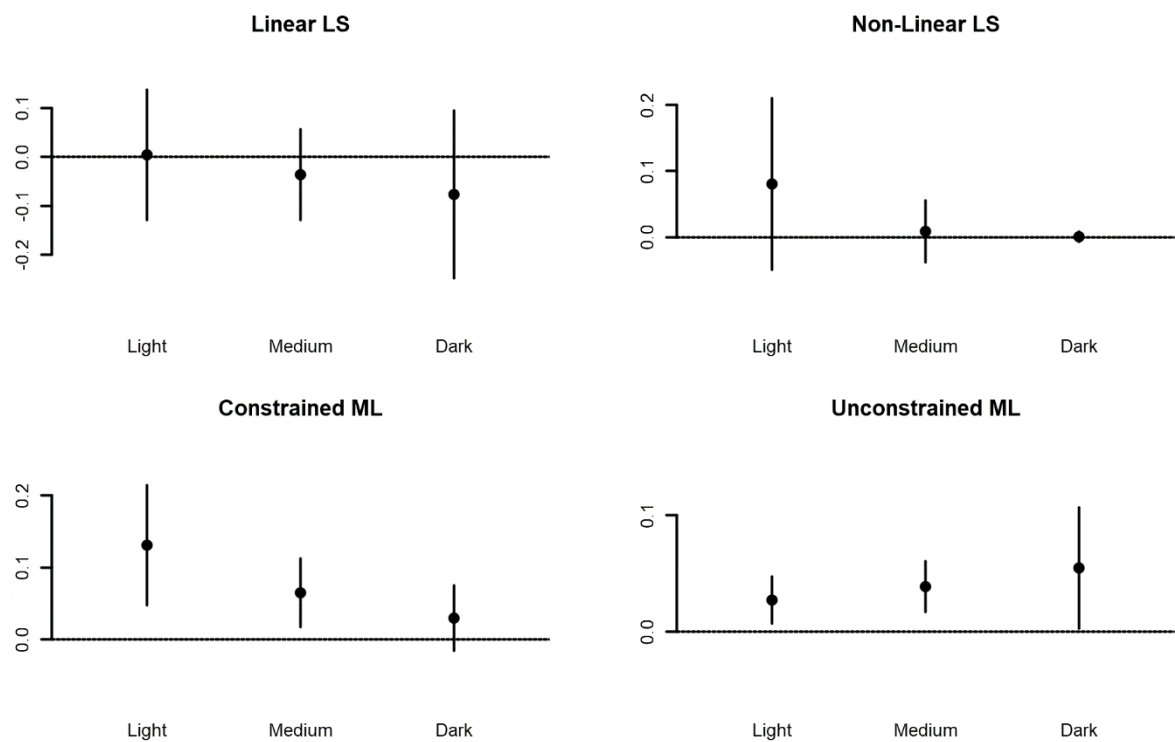


Figure D2 Estimates of Affirmative Responses by Skin Tone and Model

References

- Andrews, George Reid. 2004. *Afro-Latin America, 1800-2000*. New York: Oxford University Press.
- Bailey, Stanley R., Mara Loveman, and Jeronimo O. Muniz. 2013. "Measures of 'Race' and the Analysis of Racial Inequality in Brazil." *Social Science Research* 42(1): 106–19.
- Bailey, Stanley R., and Edward E. Telles. 2006. "Multiracial versus Collective Black Categories: Examining Census Classification Debates in Brazil." *Ethnicities* 6(1): 74–101.
- Blair, Graeme, and Kosuke Imai. 2010. *List: Statistical Methods for the Item Count Technique and List Experiment*. Available at The Comprehensive R Archive Network (CRAN). <https://CRAN.R-project.org/package=list> (February 21, 2019).
- . 2012. "Statistical Analysis of List Experiments." *Political Analysis* 20(1): 47–77.
- Glynn, Adam N. 2013. "What Can We Learn with Statistical Truth Serum?" *Public Opinion Quarterly* 77(S1): 159–72.
- Guillerm, Marine. 2017. "Les Méthodes de Pseudo-Panel et Un Exemple d'application Aux Données Du Patrimoine." *Economie et Statistique / Economics and Statistics* (491–492): 119–40.
- IBGE. 2003. *Metodologia do Censo Demográfico 2000*. Rio de Janeiro: Instituto Brasileiro de Geografia e Estatística - IBGE.
- . 2011. Características Étnico-Raciais da População: um estudo das categorias de classificação de cor ou raça. Rio de Janeiro: Instituto Brasileiro de Geografia e Estatística - IBGE.
- . 2016. *Metodologia do Censo Demográfico 2010*. Rio de Janeiro: Instituto Brasileiro de Geografia e Estatística - IBGE.
- Levy, Maria Stella Ferreira. 1974. "O papel da migração internacional na evolução da população brasileira (1872 a 1972)." *Revista de Saúde Pública* 8(supl.): 49–90.
- Loveman, Mara, Jeronimo O. Muniz, and Stanley R. Bailey. 2012. "Brazil in Black and White? Race Categories, the Census, and the Study of Inequality." *Ethnic and Racial Studies* 35(8): 1466–83.
- Lynch, Julia. 2013. "Aligning Sampling Strategies with Analytic Goals." In *Interview Research in Political Science*, ed. Layna Mosley. Ithaca: Cornell University Press, 31–44.
- Miranda, Vitor. 2015. "A Resurgence of Black Identity in Brazil? Evidence from an Analysis of Recent Censuses." *Demographic Research* 32(59): 1603–30.
- Morse, Janice M. 2000. "Determining Sample Size." *Qualitative Health Research* 10(1): 3–5.
- "Pesquisa Nacional Por Amostra de Domicílios - PNAD | IBGE." *Instituto Brasileiro de Geografia e Estatística*. <https://www.ibge.gov.br/estatisticas/multidominio/ciencia-tecnologia-e-inovacao/19897-sintese-de-indicadores-pnad2.html?edicao=18331&t=conceitos-e-metodos> (September 5, 2018).
- Seawright, Jason, and John Gerring. 2008. "Case Selection Techniques in Case Study Research: A Menu of Qualitative and Quantitative Options." *Political Research Quarterly* 61(2): 294–308.
- Silva, Nelson do Valle. 1994. "Uma nota sobre 'raça social' no Brasil." *Estudos Afro-Asiáticos* 26: 67–80.
- Telles, Edward E., and Nelson Lim. 1998. "Does It Matter Who Answers the Race Question? Racial Classification and Income Inequality in Brazil." *Demography* 35(4): 465–474.
- Verbeek, M., and T. Nijman. 1992. "Can Cohort Data Be Treated as Genuine Panel Data?" *Empirical Economics* 17(1): 9–23.
- Yom, Sean. 2015. "From Methodology to Practice: Inductive Iteration in Comparative Research." *Comparative Political Studies* 48(5): 616–644.